



E 10332



**MORELL MACKENZIE**







SIR MORELL MACKENZIE.  
From *Vanity Fair*, 1887.

# MORELL MACKENZIE

BY

R. SCOTT STEVENSON



WILLIAM HEINEMANN LTD



LONDON

WILLIAM HEINEMANN · MEDICAL BOOKS · LTD

1946

1985  
CHECKED

926.1  
STE

FIRST PUBLISHED 1946

3323  
2815

THIS BOOK IS PRODUCED IN COMPLETE  
CONFORMITY WITH THE AUTHORISED  
ECONOMY STANDARDS

PRINTED IN GREAT BRITAIN AT THE WINDMILL PRESS  
KINGSWOOD, SURREY

## CONTENTS

		PAGE
CHAPTER ONE	<i>THE LEGEND</i>	I
CHAPTER TWO	<i>THE PHYSICIAN</i>	25
CHAPTER THREE	<i>THE PATIENT</i>	55
CHAPTER FOUR	<i>THE ILLNESS</i>	65
CHAPTER FIVE	<i>SAN REMO</i>	90
CHAPTER SIX	<i>NINETY-NINE DAYS</i>	111
CHAPTER SEVEN	<i>THE AFTERMATH</i>	133
CHAPTER EIGHT	<i>A SUMMING-UP</i>	164
BIBLIOGRAPHY		182
INDEX		191

## ILLUSTRATIONS

Sir Morell Mackenzie. From <i>Vanity Fair</i> , 15th October, 1887. By "Ape" (Carlo Pellegrini)	<i>Frontispiece</i>
PAGE	
Laryngologists at Wargrave, June, 1921	<i>facing p.</i> 24
Morell Mackenzie's monogram	24
Morell Mackenzie's house, No. 19 Harley Street	<i>facing p.</i> 25
Morell Mackenzie's birthplace at Leytonstone	27
The Laryngoscope. Woodcut from Morell Mackenzie's <i>The Use of the Laryngoscope</i> , 1865	33
Laryngologists at the International Congress of Medicine, Copenhagen, 1884	<i>facing p.</i> 48
Morell Mackenzie's consulting-room. From <i>Strand Magazine</i> 1892, Vol. III, page 118	<i>facing p.</i> 49
The Little House, Wargrave	53
Sketch of the laryngeal growth as first seen on 20th May, 1887. From Morell Mackenzie's <i>The Fatal Illness of Frederick the Noble</i> , 1888	78
The Crown Prince at the Jubilee of Queen Victoria	<i>facing p.</i> 88
The Crown Princess in 1887	<i>facing p.</i> 89
Sketch of the larynx made on 6th November, 1887, showing a large new growth below the left vocal cord and a smaller one below the right vocal cord. From Morell Mackenzie's <i>The Fatal Illness of Frederick the Noble</i> , 1888	92
The Villa Zirio, San Remo	<i>facing p.</i> 104
Morell Mackenzie's operating chair. From <i>Strand Magazine</i> 1892, Vol. III, page 125	<i>facing p.</i> 105
Laryngoscope belonging to Morell Mackenzie	<i>facing p.</i> 105
Facsimile reproduction of a note written by the Emperor Frederick III. From <i>British Medical Journal</i> , 1888, Vol. II, page 835	123
Morell Mackenzie's grave, Wargrave	162

## ACKNOWLEDGMENTS

I HAVE to acknowledge His Majesty the King's gracious permission to make use of the telegrams from Sir Morell Mackenzie to Sir James Reid, for the information of Queen Victoria, which are in the Royal Archives at Windsor Castle. Sir Owen Morshead, Librarian at Windsor, and Miss M. Mackenzie, Registrar of the Royal Archives, have been very kind and helpful. In my search for information about Sir Morell Mackenzie my grateful thanks are due to many friends, especially to the Hon. Mrs. Mark Hovell, Squadron-Leader J. Ronald Mackenzie, Mr. T. McKenna, Dr. Irwin Moore, Mr. J. Mewburn Levien, Dr. L. A. Lawrence, Dr. George C. Cathcart, Sir James Dundas-Grant, Mr. John Allan and Mr. T. J. Shields (Librarian of the British Medical Association). The account of the vote of censure by the Council of the Royal College of Surgeons was kindly extracted from the minutes by Mr. Cassels, Secretary of the College, and the excerpt is published by permission of the President, Sir Alfred Webb-Johnson, and the Council. I am grateful for the courtesy of the Editors of the *British Medical Journal* and *The Lancet*, the Editor of *The Times*, the Editor of *The Spectator*, the Editor of the *Strand Magazine*, the Director of the Wellcome Historical Medical Museum, the Secretary of the Royal College of Physicians, the Secretary-Superintendent of the Throat Hospital, Golden Square, now amalgamated in the Royal National Throat, Nose and Ear Hospital, and the Town Clerk of Leyton. I owe a great deal to the staffs of the libraries of the Royal Society of Medicine, the Athenæum, the British Museum, the London Library, the Times Book Club, the Public Reference Library, Edinburgh, the Mitchell Library, Glasgow, and the Garrison Library, Gibraltar. I have to acknowledge the kindness of the following publishers for permission to quote letters, etc.: Mr. John Murray, for the *Letters of Queen Victoria*, Third Series; Messrs. Macmillan and Co. Ltd., for the *Letters of the Empress Frederick*; Messrs. Stanley Paul, Ltd., for A. R. Allinson's *War Diary of the Emperor Frederick III*; Messrs. Jarrolds, Ltd., for *The Autobiography of Sir Felix Semon*; Messrs. Geo. Allen and Unwin, Ltd., for Greville Macdonald's *Reminiscences of a*

*Specialist*, and for Carl Ludwig Schleich's *Those Were Good Days*; Messrs. Methuen and Co. Ltd., for Ex-Kaiser William II's *My Early Life*; and Messrs. G. P. Putnam and Co. Ltd., for Emil Ludwig's *Kaiser Wilhelm II*. I am duly grateful to my friends Mr. Harold Brighouse and Miss Marjorie Hollowell for reading the manuscript and the proofs respectively, and for the valuable advice they gave me.

R. S. S.

## CHAPTER ONE

### *THE LEGEND*

#### 1

As history goes, the interval between 1837 and 1888 is not long. In 1837, Queen Victoria, by a series of chances, came to the English throne; fifty years later, by a chance less fortunate for humanity, her grandson, the Emperor William II, came to the German throne, and Germany, with reaction once more in the saddle, urged on by this young, ambitious, emotional, sometimes brilliant but persistently wayward ruler, began to gallop down the steep slope that led to 1918 and eventually to 1945. It was in the character of William II's father and predecessor to have established in Germany—if given sufficient time—a firmly-rooted Liberal government. He was a man of noble purpose and anxious to prove that a Hohenzollern, who was proud of his army and had helped to unite the German Empire by victory in the field, could at the same time be a constitutional and enlightened monarch. A Germany possessing a genuinely Liberal outlook would have taken a high place of honour among the nations of the world, with peace, contentment and prosperity, and two great wars and years of conflict, bitterness and agony might well have been avoided. But Frederick III reigned, a sick man, for ninety-nine days only, and gave the world a mere glimpse of what might have been. He died untimely, blighting the hopes of every lover of liberty in Europe, and with the circumstances of his death Morell Mackenzie was dramatically associated.

Upon the correctness of Mackenzie's diagnosis and treatment depended the life of the then Crown Prince Frederick; all preparations had been made by the German doctors for an immediate operation upon the Prince's throat, but Mackenzie's decision (supported, it is true, by the pathologist's negative report) put a peremptory stop to it. When, months later, the diagnosis of cancer was more certain, and operation was again considered, the only choice then lay between a dangerous radical removal of the whole larynx and a merely palliative minor operation; the

patient, preferring the latter, lived his brief life without pain but without hope of recovery.

Mackenzie's diagnosis was a turning-point in European history, but it should be remembered that it was made when it was made—in 1887. That is, it was made by the foremost laryngologist of the time in the light of contemporary medical knowledge, and the treatment that resulted from the diagnosis was in accordance with the best opinion and methods of the day. It is necessary, therefore, in this narrative to define and delineate the condition of medical knowledge at the time of Morell Mackenzie's diagnosis and treatment. For posterity has not been kind to his memory, and the generally accepted accounts of his conduct of the case of the Crown Prince Frederick have been prejudiced and unfair to his reputation.

## II

It was during that long, hot summer of 1921, when the grapes above the Rhine grew richer and fuller than ever before, and the banks of the upper Thames, no longer the fashion but new to me, were at their loveliest, that I first began to be interested in Morell Mackenzie. As a clinical assistant I used to help Dr. Irwin Moore with an evening clinic on Fridays at the Throat Hospital, Golden Square, and sometimes he would have to hurry off to catch his train at Paddington in order to spend the week-end at his country house up the river, leaving me to struggle with the out-patients who still crowded the clinic. One evening, as a gesture of thanks, he invited me to come and spend Sunday with him at Wargrave, and in the flower-filled garden of The Little House, on the main street of that still unspoiled riverside village, he told me that the house, which a year previously he had by chance found vacant, had formerly belonged to Sir Morell Mackenzie, founder of the Throat Hospital. Mackenzie, said Irwin Moore, had never received the recognition that was his due, and for this he blamed the jealousy of his successors as *doyen* of laryngology in England, first Sir Felix Semon and later Sir StClair Thomson. Irwin Moore said that he had tried to persuade his fellow-laryngologists to take a more favourable view of Mackenzie, and in 1919 had arranged, with Dr. James Donelan, an exhibition of Mackenzie "relics"

in the library of the Royal Society of Medicine—old manuscripts and proof-sheets of articles and chapters of his books, corrected in Mackenzie's own hand, drawings of cases he had shown at medical society meetings, instruments he had designed, some obsolete, others still in use, and in particular the laryngoscopic mirrors which Mackenzie had used, most of them presented by Mr. Ernest Mayer, of the firm of surgical instrument-makers, Mayer and Phelps, who had made Mackenzie's instruments for him. The Council of the Royal Society of Medicine had refused to place the instruments and other "relics" permanently in its library, intimating that a more suitable locality was the Royal College of Surgeons Museum, and Irwin Moore was full of indignation at this, blaming jealousies that still survived. Finally they were transferred to the Wellcome Historical Medical Museum, where they remain for the present.

I felt, I must admit, that Dr. Moore was over-calling his hand, and this feeling was emphasized when, in the railway carriage on the way home, I opened the book my host had pressed upon me to read, blue-covered, surrounded by broad mourning borders, with the somewhat emotional and catch-penny title *The Fatal Illness of Frederick the Noble*, written by Sir Morell Mackenzie and published long ago in 1888. My hair rose on my scalp as I read the abuse and allegations of incompetence that Mackenzie hurled at famous German surgeons and physicians, the lurid details he gave of sick-bed and *post-mortem* scenes, the emphasis he laid on quite minor matters of surgical technique, the constant suggestions he made of conspiracies against himself, and his repeated self-justifications. The impression I got was not a favourable one, although I knew that in former days it had been quite usual for well-known doctors to slander and libel each other in the most flagrant way, and that the early volumes of *The Lancet* were full of personal attacks on surgeons and physicians of the time.

That year, the Laryngological Section of the Royal Society of Medicine held its third "Summer Meeting" in London, and Irwin Moore resolved to mark the occasion by commemorating the memory of Sir Morell Mackenzie. On Sunday, 5th June, 1921, a beautiful summer day, the members of the Section (including myself, their most recent recruit) were invited by Irwin Moore to luncheon at Wargrave, where they met Mrs. Theodore

McKenna and Mrs. Hennen, the two surviving daughters of Morell Mackenzie, and Mr. Gustave Garcia, the son of Manuel Garcia, inventor of the laryngoscope. Two by two, marshalled by the indefatigable Irwin Moore, the laryngologists walked in a little procession to the churchyard, headed by the veterans Mark Hovell and James Donelan, both former assistants of Morell Mackenzie, carrying a huge laurel wreath between them, to the accompaniment of a muffled peal from the tower of the church. At Mackenzie's grave they were met by the vicar of Wargrave, who conducted a short memorial service, while the village choir led the singing of appropriate hymns; the villagers of Wargrave crowded into the old churchyard, eager for an excuse to add a little colour to their quiet daily round, but agape with lack of understanding of the ceremony. The wreath was placed reverently—if with some little difficulty—upon Morell Mackenzie's grave, and Mark Hovell gave a touching graveside oration, telling of Mackenzie's long battle against ill-health, of his innumerable acts of private charity, and of the resounding fame of his public achievements. Sir James Dundas-Grant followed Mark Hovell, recalling Mackenzie as a fellow Volunteer—he had been surgeon to the Post Office Rifles in the 'eighties when Mackenzie was surgeon to the Queen's Westminsters—and referred to the fact that a commemorative tablet had been placed on the house at Leytonstone where Morell Mackenzie was born. Sir StClair Thomson, the recognized orator of the laryngologists, then spoke of Mackenzie as the Father of British Laryngology, and said that "following Charles Lamb's advice, whenever a new book on laryngology was published, he read Mackenzie's old one, and there found many of the so-called new ideas. His textbook was a mine of knowledge in which every laryngologist should still dig. Morell Mackenzie's *Diseases of the Throat* was the laryngologist's Bible."

It was the first time that I had heard Sir StClair Thomson speak and I was greatly impressed by his words, of which I made a surreptitious note at the time. In after years I got to know him well and heard him speak in public frequently, always with admiration. In particular I remember him at Winnipeg in 1930, at a joint meeting of the British and Canadian Medical Associations, when the crowded official dinner was held in a large hall which was acoustically awkward.

There had been one or two lengthy speeches recounting in dull detail the history of the two associations, and the diners were restive, so the order of the toasts was switched and Sir StClair was put up; in a few moments he had the hall in silence, his Canadian and American listeners enraptured with his clear delivery, his by-play with his monocle, his wit, his grace, his sense of timing—even Lord Moynihan, a famous medical orator of the same generation but with a more “literary” style, who followed him, was put completely in the shade. His end was to be a sad one, though he died in January, 1943, full of years: bombed out of his London home in Wimpole Street he retired to Edinburgh, and was knocked down by a motor-cyclist in the dusk at the corner of Princes Street. Incidentally, when writing this book, I checked Sir StClair Thomson’s quotation from Lamb; I could not find it anywhere in the published writings or letters of Charles Lamb, although it sounds like Lamb. Viscount Grey was less definite in an address he gave on “Re-creation” at the Harvard Union in 1919, which was published and widely commented upon after its delivery (and in 1926 was reprinted in Grey’s *Fallodon Papers*). His words were: “Someone has said, ‘Whenever a new book comes out, read an old one.’” The sentiment is Hazlitt’s, but not expressed by him in exactly these words.

At tea at Wargrave I happened to sit next to Dr. Donelan, who spoke to me of the invariable kindness of Morell Mackenzie to young doctors interested in laryngology; and I also had some conversation with Mrs. McKenna, who had been the constant companion of her father. This new picture of Morell Mackenzie differed considerably from my earlier impression, and I began to wonder about the truth of the Mackenzie legend. First of all I looked up the article on Morell Mackenzie in the *Dictionary of National Biography*, which was signed by the familiar and well-beloved initials D’A.P.—Sir D’Arcy Power, the veteran biographer and annotater of medical history; it had been written at the time of Mackenzie’s death, for the author acknowledged the assistance of the Rev. H. R. Haweis “who was preparing a biography of Mackenzie”. D’Arcy Power’s estimate of Mackenzie was transparently fair, though cool: “Endowed by nature with great manipulative skill, constant practice had rendered him a master

in the use of the laryngoscope and of the laryngeal forceps; but he was also by nature somewhat indiscreet, and his mind was essentially polemical . . . The English physician doubtless found on reaching the German Court that he was the object of some jealousy, and this feeling was rapidly intensified by the aggressive manner which he assumed in self-defence. The outcome of the relations thus strained was a violent and unseemly quarrel between Mackenzie and his German colleagues, in the course of which insinuations were made entirely unworthy of the high positions held by the contending parties . . . If it had not been for this episode in his career, Mackenzie would have been remembered as an able practitioner in a special department of medicine, endowed with great mechanical skill and power of invention."

The mention of a biography by H. R. Haweis led me to this book in the library of the Royal Society of Medicine—a first edition was published in 1893 and a second edition in 1894. The author talked quite a lot about himself in the book, and later on I found a shaggy portrait of him in an old volume of *Vanity Fair*, along with a brief biography by "Jehu Junior"; he was the incumbent of St. James's Church, Westmoreland Street (on the site of which is built the Heart Hospital), and his church was attended by Mackenzie's family for over twenty years. Haweis was an intimate friend, god-father of Mackenzie's eldest daughter, and had been for many years on the Throat Hospital Committee and chairman of its Samaritan Society. Educated at Trinity College, Cambridge, he was once on the staff of the *Echo* and was a popular speaker on social subjects and a ready-writer of such books as *Music and Morals*. In preparing the biography Haweis was, he said, greatly helped by Mackenzie's family and friends, but when checked from other sources it is found to contain a good many inaccuracies. The book, which is called *Sir Morell Mackenzie: Physician and Operator*, is a consistent eulogy of "the great specialist", and gives a highly-coloured and conventional picture of a doctor-hero, who was kind to the poor, the friend of princes, the scourge of his enemies, endowed with magical operative skill—and hated by the leaders of his own profession.

## III

After reading this uninspiring biography my interest in Morell Mackenzie began to diminish, but it was aroused again by the publication in 1926 of the boastful and snobbish autobiography of Sir Felix Semon. Although I had seen the short, bowed figure of Semon, who died in 1921, I had never met him, for he retired from active practice in 1909. He was a well-known figure in laryngology—"Semon's law" is mentioned in every textbook as differentiating organic from functional paralysis of the larynx, he was one of the first (if not the first) to emphasize the supreme importance of silence in the treatment of tuberculosis of the larynx, and (along with Butlin) he developed the modern operation of laryngo-fissure for early cancer of the larynx. I remembered his name in Mackenzie's biography, for at the end of one of the hospital rows which Haweis gave in detail, the report of Mackenzie's speech ended thus: "He did not hesitate to say that these charges of mismanagement were entirely the result of jealousy of an inferior man towards a distinguished young physician, his friend, Dr. Semon. (Loud and prolonged cheering.)"

According to his own account, Semon came to London in 1875 knowing hardly a word of English, with an introduction to Morell Mackenzie from Fürstenberg of Berlin, and a letter to Liebreich, a German who was ophthalmologist to St. Thomas's Hospital, from his mother, who was an old friend of Liebreich's. Mackenzie welcomed him, helped him to find lodgings, encouraged him to translate his own forthcoming two-volume textbook into German, persuaded Semon's family to allow him to stay on in London, put him on the staff of his own hospital, and stood by him when trouble arose with the hospital committee. Semon repaid all this by declining to help (although offered a fee) with the second edition of the textbook unless his name appeared as joint-author (only five years after he had come to London), by refusing "after a most unpleasant consultation" to meet Mackenzie in private cases, by making outrageous insinuations against Mackenzie's character, and by suggesting (in his autobiography) that if Mackenzie's most famous patient, the German Crown Prince, had come to him instead of Mackenzie his life would have been saved! At

the time of Mackenzie's controversies with the German doctors Semon intrigued behind the scenes and kept Prince Bismarck's son Herbert (an old acquaintance of Semon's) primed with medical ammunition to use against Mackenzie. Semon's rival colleagues are described by him as "sly competitors", and he himself as the champion of "honest specialism". His statistics are fantastic: "When in 1909 I retired I could look back upon no fewer than eighty per cent. of lasting cures" (of laryngeal cancer)—no period of time or number of cases or type of case is mentioned. When, after his retirement, Semon published in two handsome volumes his collected scientific papers, he printed them in German, not English, as more "scientific"—and as they were published not long before the war of 1914–18 they were read neither by the Germans nor by the English.

I asked my old friend Dr. George Cathcart (younger brother of Charles Cathcart, a famous Edinburgh teacher of surgery) who knew them both, how Semon compared with Mackenzie. "Mackenzie was incomparably more skilful and was also a much nicer man," he answered. "McNeill Whistler, the laryngologist, Jimmy Whistler the artist's elder brother, told me that when Semon came as a stranger to London, Mackenzie sent him with Semon to find lodgings for him. After the Emperor Frederick died, Semon went round London saying 'Mackenzie killed my Emperor', and because of that Sir Henry Irving, who was a great friend of Mackenzie's, got him black-balled when he put up for the Garrick Club."

Dr. Cathcart told me that he did not know Mackenzie as intimately as he might have done, for when he applied to become house surgeon at the Throat Hospital, he took with him a letter of introduction from Greville Macdonald, a former assistant of Mackenzie's, not knowing that their relations had become strained after Mackenzie's return from Berlin. So, instead, he became house surgeon to Edward Law and McNeill Whistler at the London Throat Hospital in Great Portland Street, an off-shoot of Golden Square (with which it amalgamated again in 1920). In his earlier days Dr. Cathcart was chiefly interested in problems of voice production; he had himself been a pupil in Naples of Scafati, teacher of the old Italian *bel canto*, in order to cure a slight stammer, and insisted on the importance of thoracic as opposed to abdominal breathing in

singing—a thesis in which he found himself in agreement with Morell Mackenzie and in opposition to most other laryngologists and teachers of voice production. Morell Mackenzie, in a famous lecture on “Speech and Song” (afterwards reprinted in his collected essays), had attacked the high concert pitch as causing vocal strain. “That the high concert pitch now generally used, especially in this country,” he said, “throws an unnatural strain on even the finest voices is a fact as to which most authorities are agreed. The desire to get increasingly brilliant effects from the orchestra forced the pitch higher and higher, till so much confusion prevailed that, in 1859, a French Commission fixed the standard pitch at 435 vibrations. This is called the normal diapason, and is now generally used on the Continent; but England, with her customary insular independence, has not conformed to the general rule in this matter, and the pitch has in this country actually risen to 458 vibrations . . . But it will be said: Since it is all a matter of convention, why cannot the pitch be lowered? I believe the chief obstacle is the expense which this would involve through the necessity of altering instruments. But worse even than the undue height of the pitch is the difference between this country and the rest of the civilized world which has just been referred to. Herr Joachim complains that he is obliged to begin screwing up his violin eight weeks before he comes to England, in order that the instrument may not be injured by a sudden change. It is not easy, however, for the singer to prepare his delicately strung instrument in the same way, and the result is necessarily great strain to the vocal cords and throat generally.”

In his enthusiasm to prevent vocal strain George Cathcart, then a youthful bachelor of independent means, spent several thousand pounds in launching the Promenade Concerts in 1894, with his young friend Henry Wood as conductor, on condition that the instruments should be tuned to French pitch and not to the higher concert pitch; he had to buy the necessary orchestral instruments in Brussels, though eventually the various members of the orchestra acquired them from him.

Dr. Cathcart emphatically agreed with me that Semon’s autobiography gave a biased and jaundiced view of Morell Mackenzie, and rightly went on to say that the best way to get to know a man was to read the books he had written. In view of my

interest, he presented me with the two volumes of Mackenzie's classical *Diseases of the Throat and Nose* (the first volume published in 1880 and the second in 1884), and also his *Use of the Laryngoscope* (published in 1865), all of which had belonged to his friend the late Hunter Tod, aural surgeon to the London Hospital, who, knowing well that he was then fatally ill, was one of the little band of laryngologists at Wargrave in June, 1921.

## IV

By the time I had read half-way through the opening chapter in the first volume of *Diseases of the Throat and Nose*, devoted to the pharynx, larynx, and trachea, I could recognize the hand of a master: the extensive research, the detailed yet clear anatomical and pathological descriptions, the brief but practical commentaries on the necessary instruments, the exhaustive and fully documented accounts of the diseases, the obviously complete knowledge of their treatment as then understood, and the open frankness about the author's failures as well as his successes. Mackenzie was careful throughout his book to give credit to those whose views or methods he adopted; already on page 10 he described his famous tonsil guillotine, really a new instrument and the prototype of those in use to-day (I found one of Mackenzie's original models, with wooden handle, still in regular use, and used it myself, when I took over a tonsil clinic at University College Hospital in 1923), as a modification of Physick's tonsillotome, although the latter was a very primitive instrument which dated back to 1827. His historical notes and case-notes were frequent and illuminating, his references at the foot of almost every page accurate and numerous, culled from English, American, French, German and Italian medical literature, as well as from classical sources. In his preface Mackenzie acknowledged the help of Felix Semon "for many important suggestions and much keen criticism", and of Gordon Holmes (the laryngologist, not the neurologist), who was a classical scholar, "for valuable aid in matters of historical research". Every subject was treated in a systematic, exhaustive and concise manner, so that when I turned to the author's account of the removal of non-malignant tumours of the larynx I was surprised

to read that, in order to facilitate the delicate operation, an opiate or bromide of potassium was administered to the patient, and sucking ice or the (almost useless) local application of chloroform or morphia recommended—until I remembered that in 1880 cocaine had not yet been discovered, and before the middle 'eighties laryngologists had to cultivate almost unbelievable dexterity in removing small growths by curved forceps from the interior of the highly sensitive larynx. As Mackenzie said (on page 318) it required "ingenuity on the part of the operator in overcoming difficulties by means of mechanical contrivances, but above all, perhaps, the intelligent co-operation of the patient". The second volume was exhaustively concerned with the nose (and the oesophagus), and here I was surprised to find—except for a brief mention, in the section on anatomy, of the existence of ethmoidal cells and of the ostium of the antrum—no account whatever of the nasal sinuses or their diseases. I had not realized that our knowledge of such common, every-day conditions was so recent, for I knew that the medieval anatomists were familiar with the air sinuses and that Highmore described the maxillary antrum, which in the anatomy textbooks bears his name, in the middle of the seventeenth century. But I have since found out that medical interest in disease of the nasal sinuses began only about 1887 or 1888 and was considerably increased and stimulated by the discovery of X-rays nearly a decade later.

*The Use of the Laryngoscope in Diseases of the Throat*, Morell Mackenzie's first book, had been published a good many years previously, in 1865. It was a well-produced volume, illustrated by a large number of excellent wood-cuts, giving an illuminating history of the laryngoscope and the earlier attempts at laryngoscopy, and describing the new instruments and methods of examination and treatment, with illustrative cases. I found this early forecast of the specialty of laryngology fascinating to read, and Mackenzie—as I had already found in his great two-volume textbook—gave full credit to his predecessors, teachers, and contemporaries. Optimistically he advertised, facing the title-page, a forthcoming book on diseases of the throat, the publication of which was not destined to be completed, after having been written and re-written several times, until nearly twenty years later.

## v

There were published in 1926, besides Semon's autobiography, the English translations of two German books which kept up my interest in the story of the Emperor Frederick III and Sir Morell Mackenzie. The first to appear was the Ex-Kaiser William's second volume of reminiscences, entitled *My Early Life*, which was published serially in *The Spectator* before being produced in volume form. I had not taken much notice of the serial publication until I heard that Irwin Moore had a long letter in *The Spectator*, criticizing in severe terms the opinions expressed by the Ex-Kaiser on Morell Mackenzie. Irwin Moore wrote: "Having had free access to the private papers of the late Sir Morell Mackenzie, also of his chief assistant, the late Mr. Mark Hovell, I am in the position emphatically to refute the scandalous and malicious charges levelled by the Ex-Kaiser against this distinguished specialist, whose scientific attainments were so well known, and whose memory is still held in such high esteem, not only in this country, but throughout the world . . . The Ex-Kaiser expresses doubt as to whether Sir Morell Mackenzie 'really pronounced his diagnosis in good faith', charges him with 'being out not only for money, but also after the English aristocracy', and states that 'the decisive proof is that on the journey back to England after the death of my father, he admitted that his only reason for not diagnosing the disease as cancer was that the poor Crown Prince should not be declared incapable of assuming the Government'. Can anyone in their senses believe for one moment that there is a particle of truth in this scandalous allegation? Why has the Ex-Kaiser waited thirty-eight years to elapse before making this accusation? Where is the decisive proof to which he refers? I challenge him to produce any evidence whatever which can confirm his statement."

Irwin Moore went on to give his own account of the circumstances under which Morell Mackenzie went to Berlin and quoted Mackenzie's statement of his position from *Frederick the Noble*. "It would seem clear, therefore," concluded Moore, "that the accusations against Sir Morell Mackenzie are founded on nothing more substantial than the distorted and perverted imagination of the Ex-Kaiser. Sir Morell Mackenzie's great-

ness was demonstrated, and may be estimated, in the case of the Crown Prince, by his superior knowledge and experience of contemporary surgery, for whatever can be said for or against his diagnosis and treatment the fact remains that, by his opposition to operation, he saved for the German nation the Crown Prince's life for a considerable time."

In the meantime, before the publication of the final instalment of the serial, the Ex-Kaiser's reminiscences had been published as a book, and I hastened to read what he had written about Mackenzie. "The decisive interference of the Englishman Mackenzie on the evening before the day fixed for the operation had the most disastrous consequences. As the result of an examination, which took place immediately upon his arrival, he declared that it was not a question of cancer, but of a polypous or fibromatous swelling which could be removed, without any operation, in from six to eight weeks by a cure which he could prescribe; only the Prince 'like any other mortal' must come into his clinic for treatment. The recovery of my father's voice 'so that he would be able to command an Army Corps at a review', he represented as absolutely certain. He strongly opposed the operation planned by the German doctors. Can my sick father, and my mother, who trembled for the life of her husband, be blamed if, in view of such decided expressions of opinion on the part of a distinguished specialist, they believed and trusted him and decided for the safe method? This was to do even more than the operation, which would involve lasting hoarseness! It is another question whether the Englishman really pronounced his diagnosis in good faith. I am convinced that this was not the case. It is not only that he was a laryngological authority to whom a diagnosis so mistaken can hardly be credited, but the haste with which, without waiting for the result of his treatment, he was out not only after money, but also after the English aristocracy, tells against him, too."

I did not know then, as I do now, that the Ex-Kaiser (and the "ghosts" who had assisted him with the writing of the book) accepted Court gossip and newspaper scandal as suitable foundations on which to build a historical narrative. But, knowing how he had behaved towards his ill-fated father and his mother, I could not give his sentiments much credence when he wrote: "It was harrowing to see with what love and devotion my

mother nursed her sick husband and how nothing in the world would persuade her to believe the awful truth. She would not grasp the fact that her glorious husband was being killed by an incurable cancer. Mackenzie still remained the great man who had her confidence and beside whom the pessimistic German doctors were as nothing. The diagnosis of cancer, with which he himself had agreed in November, he had in the meantime once more light-heartedly abandoned, and had inspired my mother with renewed optimism."

That autumn the German historian Emil Ludwig's book, *Kaiser Wilhelm II*, was also published in an English translation. It proved to be an earnest study of the catastrophic influence of an ambitious, war-minded young monarch, backed by a reactionary party, upon an easily-led people, and I knew Ludwig to be a historian of repute, though perhaps not of the highest standing. The Kaiser, eldest son of the Crown Princess, had had his shoulder dislocated at birth, causing permanent paralysis of the left arm (the dislocation was apparently overlooked for some time), and Ludwig wrote as follows: "Ever since William's unhappy birth, Victoria [the Crown Princess] had stubbornly clung to the nonsensical idea that the German physicians were to blame for her son's disability [which appears to be true]. This *idée fixe* induced her—so all her surviving friends agree—to underline her distrust of German therapeutics by calling in an Englishman for her husband . . . She stands indicted for serious indiscretion. She summoned from her native land an undistinguished physician, simply because she attributed a shortcoming of Nature to the physicians of the land she had adopted."

I felt that I could hardly accept Ludwig's authority seriously after reading this. By the time he wrote the book he must have known the international reputation of Morell Mackenzie; no doubt he used the adjective "undistinguished" from the German point of view of assessing a physician's standing by his Court and official appointments. Compared with the German doctors in attendance on the Crown Prince, *Geheime Ober-Medizinalräthe*, Excellencies, Privy Councillors, Army Medical Director-General, Berlin University Royal Professors, Physicians-in-Ordinary and Surgeons Extraordinary to the Emperor and the Crown Prince, plain Dr. Morell Mackenzie might

indeed sound "undistinguished". Reading further, I found that Ludwig swallowed every German slander of Mackenzie as a proven fact, and anonymous newspaper attacks as historical evidence of Mackenzie's delinquencies. "The removal of a single specimen of tissue by the Englishman," wrote Ludwig, "caused injuries to the larynx, which the German doctors attributed to maladroit handling. The abandonment of the operation undoubtedly resulted in aggravation of the cancer, and death in the course of a year. The result of a timely operation would in all probability have been survival for years, possibly for decades —thus setting another man on the throne of Prussia, and with him another course of policy. At the same time Bismarck wrote in his unmistakable style an article in the *Norddeutsche Allgemeine Zeitung*, the purport of which was that Mackenzie now declared that he too had quite clearly recognized the disease from the first, but that the Crown Prince had confided to him that he did not wish to be pronounced incurable, but on high moral and practical grounds desired to reign for a short time. A perversion of the truth! There existed no constitutional law whereby incurable disease excluded the heir-apparent from the throne of Prussia. On the other hand he gave us clearly to understand that he would not assume the sceptre if it were established beyond question that he was incurably attacked by cancer; which was in accordance with his fine unselfish way of thinking. As this was known, those who (for motives over which we had no control) desired to bring the Emperor Frederick, even though incapacitated for government, to the throne, made it their object to deceive the exalted patient as to his condition. It is now established beyond question that an unimportant (*unbedeutender*) English physician of Radical political opinions took upon himself to play the Privy Councillor, and intervene directly in deciding the destiny of the German nation."

Ludwig was determined to stress the "unimportance" of Morell Mackenzie. In view of the emphasis laid on his "Radical political opinions" I tried, long afterwards, to ascertain Mackenzie's political views, but without much success: surviving friends and relatives could not remember that he had any particular politics, though a phrase in one of his essays about "tumours as motley in their composition as the various sections

of the 'great Liberal party' " would lead one to believe that he was Conservative rather than Liberal. Possibly the word "Radical" is used because Mackenzie's supporters among the German newspapers were the Liberal anti-Bismarck ones.

Sir Rennell Rodd, in a lengthy communication to *The Times* in November, 1926, sharply criticized the accuracy of Emil Ludwig's statements, especially on the responsibility for the summoning of Morell Mackenzie. Rodd was able to give facts that had come under his personal observation, which he had previously related in 1922 in his *Social and Diplomatic Memories*. The Crown Princess early in 1887 came to luncheon at the British Embassy in Berlin, where Rodd was then a secretary, to attend a christening. In conversation with the Ambassador, Sir Edward Malet, the Princess spoke of her anxieties about the Crown Prince, and Malet suggested the advisability of obtaining another opinion. The Princess in reply expressed her ignorance of who were the best authorities. Almost immediately after this conversation, relates Rennell Rodd, Prince Bismarck called upon the Ambassador and told him that he had just discovered that the doctors in charge were about to perform a very serious operation on the Heir-Apparent without having informed either the reigning Emperor or his Chancellor. He spoke with considerable heat about their having presumed thus to act without official warrant. He had, he said, placed his views before the Emperor, who had intervened, and the best specialist advice obtainable was to be consulted before a final decision was taken. The choice had really lain between an Austrian and an English specialist, and after due consideration Dr. Morell Mackenzie had been telegraphed for. Rennell Rodd said that he had always assumed that it was because an English specialist had been selected that Bismarck, whose visits were comparatively rare, had called at that particular moment on the Ambassador.

Emil Ludwig published a reply to Sir Rennell Rodd's comments, refusing to accept the evidence on which they were based. He suggested that the recollections of a secretary at the British Embassy could hardly weigh seriously against the general consensus of the German medical authorities at the time.

## VI

By the end of 1926 I was in the toils of an obsession: I had to know the truth about Morell Mackenzie. Was he the hero or the villain—or was he possibly a little of each? Fortunately I had got to know Mark Hovell, for his doctor, Lennox Wainwright, had a consulting-room in Dr. Cathcart's house and was a good friend of mine, and I had had several talks with him about Mackenzie. As will be seen in due course, Mark Hovell retained an intense admiration for his old chief, and had a very clear recollection of many important events that had not been put on record—but he died in the summer of 1925, though he left some interesting documents behind him. James Donelan had died suddenly in a tea-shop in 1922, but he had preserved his reminiscences of Mackenzie in a presidential address to the Section of Laryngology, published in the *Journal of Laryngology* in 1919; he was insistent that the Royal College of Physicians was the chief official antagonist of Mackenzie, not the Royal College of Surgeons, as was stated in the brief article in the *Encyclopædia Britannica*, but in this, I found later, he was mistaken. Gordon Holmes, a man of vast learning, author of a two-volume history of the age of Justinian and Theodora, who had supplied Morell Mackenzie with most of his classical allusions, had become a recluse. He lived among his books in a flat over his clinic in the City Road, which he had designated the Municipal Throat and Ear Infirmary, and which, in the old-fashioned way, he had tried to sell to a friend of mine as a going concern; he used to sit in a corner at meetings of the Section of Laryngology, clad in a long overcoat and a muffler, never speaking to anyone. I approached him with some diffidence, but he expanded on the subject of Morell Mackenzie, though he had little new to tell me except about the publication of Mackenzie's textbook and the fire at the printers that nearly destroyed it (as will be related in its proper place). The last survivor of Mackenzie's assistants was Greville Macdonald, son of George Macdonald the novelist, but I did not consult him because, to tell the truth, I did not know that he was still alive—until in 1932 he published his reminiscences, including some lively recollections of Mackenzie.

I began to cultivate friendly and unfriendly sources of infor-

mation about Morell Mackenzie, individuals who were related to him, knew him personally, or possessed documents connected with him, and I read the mass of books, journals and newspaper files dealing with the period. I renewed my acquaintance with Mackenzie's eldest daughter Ethel, Mrs. Theodore McKenna (her husband was a cousin of the novelist, Mr. Stephen McKenna, and a connection of the famous Liberal Chancellor of the Exchequer), who in her younger days had a reputation as an author and critic; she had many fond and revealing memories of her father, but she did not encourage me to write about him or to revive what were to her old, unhappy controversies; she died in 1929. I found that few letters actually written by Morell Mackenzie were extant, and the family documents available were disappointing, consisting of newspaper cuttings and the like. Through Dr. Cathcart I met Mr. Mewburn Levien of the Guildhall School of Music, who had a rich store of memories of Morell Mackenzie and his family—of which I have made due use—for his greatest friend had been Harry Mackenzie, the laryngologist's son. Harry went on the stage under the name of H. H. Morell, but his health was poor and he died comparatively young, being buried beside his father at Wargrave. He was a good actor—I can remember him in Sir Herbert Tree's company—and he also essayed stage authorship and management. Mewburn Levien was with him at 19 Harley Street on the Sunday after the publication of *Frederick the Noble*, which the Sunday newspapers reviewed with the severest condemnation. "The guv'nor can't understand it," said Harry Mackenzie to Levien, "he expected to be praised to the skies for his book."

Sometimes I had unexpected luck: one evening at a dinner party at the Savoy I was placed next to a bewitching old lady, Lady Duff Gordon, who had been Lucille, the first of the "Society" dressmakers. In the course of conversation she said to me: "I understand you are a throat specialist. I used to have a great friend who was a famous throat specialist—Sir Morell Mackenzie, have you heard of him?" "Heard of him?" I echoed, "I'm going to write about him some day! Do tell me all that you can remember of him." Lady Duff Gordon said that Mackenzie was the most charming man one could possibly imagine, with the gentlest hands. His waiting-room was always crowded,

and it was impossible to see him without waiting for an hour or two, unless one tipped the butler heavily or—like herself—possessed one of Mackenzie's visiting-cards, with "Admit at once" written upon it in his own handwriting. He had two consulting-rooms, and when a patient was shown in to wait the butler used to pin a card with his (or her) name on it upon the door, which Mackenzie would read and remove, so that he was always able to greet the patient—if he had seen him before—by name. She said that it was impossible to imagine the *furore* created by the case of the German Crown Prince; nothing else was talked of for months, and Mackenzie's name was on everybody's lips every hour of the day; she had known people to stand on chairs in a hotel restaurant to watch Mackenzie at dinner.

As the years went on, much new material concerning Morell Mackenzie came to light and was printed, especially in the letters of the Empress Frederick, published in 1928, and the third series of the letters of Queen Victoria, published in 1930. Sir Frederick Ponsonby, who edited the Empress Frederick's letters, told an interesting story about them in his preface to the volume: When King Edward VII visited his sister, the Empress Frederick, in Germany in 1901, during her last illness, Ponsonby, whose wife was a great friend of the Empress, accompanied him as equerry. The Empress asked him to take her letters back with him to England, and sent them to his room secretly in two large black corded boxes in the middle of the night, as she did not want her son, the Emperor William II, to know that they had gone. The boxes were labelled as books and porcelain, to be handled with care, and after some adventures the letters reached England safely and were left untouched in Ponsonby's private house at Old Windsor for twenty-seven years. Continual reference to and criticism of the Empress "in recent publications" led him to reconsider his responsibility in the matter and examine the letters; he found evidence that they were intended for publication at a suitable time, and he duly edited and published them in 1928.

*The Tale of a Times Correspondent* by Charles Lowe, which was published in 1927, was much less friendly towards Mackenzie, but I did not come across this book until some years later. When I was studying the files of *The Times* for 1887,

and 1888 I was greatly struck with the pertinacity and perspicacity of the Berlin correspondent of *The Times*, who was indefatigable in his news-gathering: he had something every day about the Crown Prince and his illness and his doctors—sometimes only a paragraph, often half a column to a column, and once over two columns. I wrote to the present editor of *The Times*, asking if I might know the name of this correspondent; he referred me to Mr. Stanley Morison, the historian of *The Times*, who kindly informed me that it was Charles Lowe, and that he had published in 1927 his reminiscences, which contained a detailed account of his stormy relations with Morell Mackenzie. Lowe was a perfervid Scot, who had studied under Professor Blackie at Edinburgh University and written poetry for the university magazine that was edited (for a brief period) by Robert Louis Stevenson. He accused Mackenzie of trying to "inspire" him to his own advantage; said that he had never come across a man "so vain and so avid of advertisement"; suggested that Mackenzie "thirsted for the renown of being a Kaiser-maker"; and that "Mackenzie was admirably fitted by nature to play the double rôle imputed to him by his German critics and the German government, for he possessed a subtle, Celtic, and insincere mind and manner". My faith at first was a little shaken, and I had to read the autobiography through more than once to gain an insight into Lowe's own self-centred, truculent and jealous character, and to allow for his intense admiration of Mackenzie's enemy, Bismarck—of whom Lowe wrote a two-volume biography—before I could balance this anti-pathetic estimate against what I already knew of Mackenzie. But Lowe quarrelled with Mackenzie because he thought that he deliberately misled him in regard to the Emperor Frederick's illness (this will be explained later) and *The Times* treated Mackenzie outrageously (though admittedly by the mistake of a reporter) by printing in a law report, while his patient was still alive, that "the Emperor is not expected to live much longer and when he dies a storm will break out against Mackenzie"; and by repeating the allegation that "knowing the Emperor suffered from cancer, Mackenzie denied it, in order that he might not be excluded from the succession"—*canards* that Lowe had no compunction in recalling in his reminiscences forty years later. Lowe showed equal bias and vindictiveness in

his attitude towards Moberly Bell, the famous manager of *The Times*, who put it on its feet again after the Pigott and Parnell disaster—which cost the newspaper a quarter of a million pounds and almost its reputation—and who bluntly terminated Lowe's connection with *The Times*, in spite of the excellence of his work as a correspondent. Lowe's recollection of facts, too, showed itself as not impeccable; on page 287 he said that “Mackenzie's threatened action against *The Times* 'fizzled out'—as how else could it?—and never came into court”, whereas, on the contrary, I found that the action not only did come into court, but was reported in detail in several columns of *The Times* and Mackenzie was awarded substantial damages and costs. I was able, therefore, to discount the venom of Charles Lowe.

## VII

I found the personal reminiscences of Mackenzie by such contemporary laryngologists as Greville Macdonald, Bryson Delavan and Chevalier Jackson invaluable, but they all contained inaccuracies when checked from other sources. The best and fairest obituary of Mackenzie is that by Norris Wolfenden, with a good portrait, in the *Journal of Laryngology*. The most important source-book in German is the pamphlet of sixty-two pages issued in 1888 from the Imperial Press at Berlin, *Die Krankheit Kaiser Friedrich des Dritten*, the official report of the German doctors who attended the Emperor Frederick III, edited by Professor von Bergmann. This “scientific statement” was in fact a violent, personal and scurrilous attack upon Morell Mackenzie, and after reading it, I began at last to appreciate Mackenzie's point of view in insisting on a similarly personal and vehement rejoinder, addressed to the general public rather than to the medical profession, in his *Frederick the Noble*. Some German authors of biographies and reminiscences of the period discussed Mackenzie and the Emperor Frederick at length, but most of them showed themselves to be unreliable, merely repeating the scandalous stories I already knew, Prince Alexander von Hohenlohe being one of the few exceptions.

Rennell Rodd's reminiscences proved particularly useful to me, as he was in close touch with the Empress Frederick after her husband's death. She was anxious to do something for

Mackenzie's Hospital for Diseases of the Throat, and asked Rodd to write a biography of the Emperor Frederick, to which she would contribute an introduction; the proceeds would be given to the funds of the hospital—which in due course benefited considerably. Rodd readily received the authorization of the Foreign Secretary, the Marquess of Salisbury, to write the biography, which was translated into German, French, Italian and Greek, and had a large sale; it was expected to give some interesting revelations, but in actual fact there was little that was new in the book, and nothing sensational. But the Bismarcks resented the eulogy of the Emperor Frederick, and the Emperor William II was annoyed that Rodd—a secretary of the British Embassy—had written the book without asking his approval. He did not forgive him, and when he met him in the following year he pointedly ignored him—an unpleasant incident, as Rodd remarks, at the outset of a diplomatic career. I read several other biographies of the Emperor and of the Empress Frederick, some of them written by English authoresses of Victorian days in a sentimental vein. The standard life of the Emperor Frederick is the three-volume German one of Margaretha von Poschinger (published in 1898–1900), of which there is a one-volume English version by Sidney Whitman; G. Freytag and O. Richter wrote shorter biographies in German, of which the former has been translated into English, and H. Welschinger wrote an interesting biography in French. Sir Frederick Ponsonby's collected letters of the Empress Frederick have already been discussed, and Princess Radziwill's reliable biography of the Empress is founded on her own personal recollections. An anonymous life of the Empress Frederick, published in 1913, is authentic and is frequently quoted by Sir Frederick Ponsonby—it may have been written by another member of his family.

The Crown Prince Frederick at the time of Queen Victoria's Jubilee in 1887 deposited his diaries at Windsor Castle for safe keeping, but after his death, his son, the Emperor William II, by an official decree ordered the return and examination of his father's papers, which was duly carried out; they were used by him, when in exile in Holland, in preparing his own volume of reminiscences, *My Early Life*. Frederick's *War Diary* (of the Franco-Prussian War) which the author had left explicit instruc-

tions was not to be published for fifty years, was published in Germany in 1926 and in London, in an English translation, in 1927. Of the numerous books I read on Bismarck, Grant Robertson's is the best; Bismarck's own memoirs are coloured by what he wished posterity to remember of him, and Busch's three volumes are frankly gossip, but valuable because taken from a diary kept during twenty-five years of official and private intercourse with the great chancellor.

## VIII

I went out to Leytonstone to look for Mackenzie's birthplace and judged, as it was a doctor's house over a hundred years ago, that it was probably in what is now the bustling main street of that thickly populated suburban district of East London. In the Post Office nobody had ever heard of it—but none of the clerks, so one of them told me, belonged to Leytonstone, and the postmen were not interested in sentimentalities. I was more fortunate with a police-sergeant, who told me that policemen noticed such things as tablets and inscriptions when on the beat, and he directed me to the corner of Browning Street and 742 High Road, Leytonstone, where I found a tall old red-brick house, the front of it now a fruiterer's shop, but the back of the house as it must have been in Morell Mackenzie's youth. An oval tablet on the side wall had carved upon it: "Sir Morell Mackenzie was born here, July 7th, A.D. 1837. Erected by L.U.D.R.A., 1909." The initial letters I have been informed stand for "Leyton Urban District Ratepayers Association."

I became familiar with the appearance of the interior of Morell Mackenzie's own house through an invaluable if unethical "illustrated interview" published in the *Strand Magazine* early in 1892. Although the ironwork of the façade has been modernized, No. 19 Harley Street still stands to-day much as it was in the 'eighties; the huge waiting-room has been divided into two, but the larger consulting-room and the smaller "gothic" one are not greatly changed, the latter showing signs of its former decoration; the large drawing-room upstairs has been divided into two consulting-rooms. The late Mr. Trace, the Howard de Walden agent, kindly showed me the documents relating to the various leases of the house, the renewed lease of

which remained in the hands of Mackenzie's family until June, 1914. The Little House at Wargrave has changed hands more than once—I found it "to let" just before the war, and had to be restrained by my family from taking it on the spot—but its Victorian Tudor appearance is that which Mackenzie gave it, and his monogram in stained glass is still on one of its front windows.



Morell Mackenzie's monogram

I gradually accumulated a large portfolio and several note-books of transcripts and annotations concerning Morell Mackenzie, but I had other commitments and never got down to writing the book I intended. The fortunes of war, however, sent me to a military hospital on the "bonny banks" of Loch Lomond, and there during the long winter evenings in my billet at Auchmar I had at last the time to indulge the pangs

and pleasures of literary composition, visiting when I went on leave such libraries as I could, for the Scottish National Library and the British Museum were both closed in war-time. I was posted overseas to Gibraltar and expected that I should have to suspend my writing; but I took my portfolio and note-books with me and came with delight upon the Garrison Library, founded by William Pitt in 1804 for the benefit of the officers of the fortress. In the peaceful atmosphere of its Georgian club-house I browsed among the files from 1850 of *The Times* and the *Illustrated London News*, and devoured its collection of histories, biographies and other reference books, bought as they had appeared all through the nineteenth century up to the present day. And so, at length, this book was written (and re-written), in the sunshine under the purple bougainvillæa and the orange-trees in the *patio* of the Library or on my breezy balcony overlooking the warships in the Bay, and sent home chapter by chapter by air-mail to be typed. It is over fifty years since the only biography of Morell Mackenzie was published, and the quarrels and passions have long been stilled. "Some day, when we are all dead, the truth will be known," said his biographer. So far as the truth can be known to-day, I have tried to tell it without conscious bias; this book contains no imaginary conversations and there is authority for every statement of fact.



LARYNGOLOGISTS AT WARGRAVE, 5TH JUNE, 1921.

*Top row:* Hunter Tod; T. B. Layton; Stuart Low; H. Banks-Davis; J. B. Horgan; R. Scott Stevenson.  
*Middle row:* Manuel Garcia; Sir James Dundas-Grant; Herbert Tilley; Professor Hobday; Philip Franklin; Irwin Moore.



MORELL MACKENZIE'S HOUSE.

No. 19, Harley Street.

(as it is today)

## CHAPTER TWO

### THE PHYSICIAN

#### I

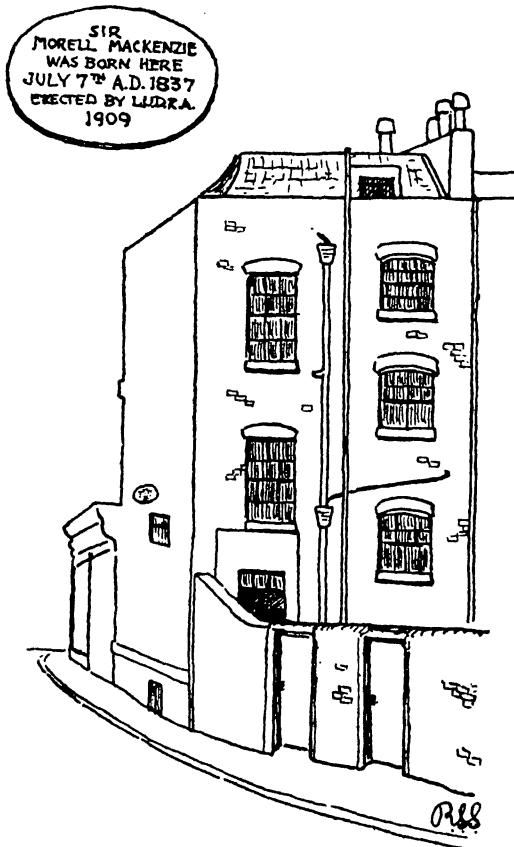
MORELL MACKENZIE came of a middle-class family with some interesting connections. He was descended from the Scottish family of Mackenzie of Scatwell in Ross-shire, the head of which in the present generation is the ninth baronet, and the Rev. Bernard Mackenzie, the great-grandfather of Morell Mackenzie's great-grandfather, was minister of Cromarty in 1690. J. A. Mackenzie, his great-grandfather, made a comfortable fortune as a wharfinger and retired to St. Neots in Huntingdonshire, and his grandfather, the Rev. John Mackenzie, who published a *Life of Calvin* in 1809, married Miss Elizabeth Symonds, a great-aunt of John Addington Symonds, the critic and essayist (who was a cousin once removed of St. Loë Strachey of *The Spectator*), and an aunt of Sir Rowland Hill, the inventor of penny postage. Morell Mackenzie's uncle, Charles Mackenzie, was an actor well known on the Victorian stage under the name of Henry Compton (the surname was his grandmother's), famous for his Shakespearean clowns, the father of the stately actress always called briefly Miss Compton, who married R. C. Carton, the dramatist (brother of Sir Anderson Critchett, the ophthalmic surgeon), and of the actor Edward Compton, who is best remembered for his touring company which for years played with distinction the comedies of Goldsmith and Sheridan. Edward Compton was the father of a large family connected with the stage, notably Miss Fay Compton, the actress, and Mr. Compton Mackenzie, the novelist.

Morell Mackenzie's father was Dr. Stephen Mackenzie, a general practitioner in Leytonstone, Essex, then a country village on the edge of Epping Forest six miles north-east of London, where city business men built their villas and came out to breathe the fresh air. He was a man of culture, with literary interests—his son preserved a letter which Lord Macaulay had written to his father regarding the publication of the famous *Essays*—and

made a reputation in the treatment of nervous disorders, especially hysteria, to which Brudenell Carter testified in his work on that subject. Born on 7th July, 1837, at what is now 742 High Road, Leytonstone, Morell was a delicate child whose early education had been interrupted by illness, but he soon made up on his initial backwardness when he was sent to the private day-school at Walthamstow of Dr. Glennie Greig, many of whose pupils entered the service of the East India Company. In after years his school-fellows remembered that he had been a prize-winner, with an aptitude for French and Latin verse, a talent for drawing, and some skill in playing cricket. He was looked upon as an earnest and reflective boy, who early showed that capacity for interesting himself in everything and everybody which was to accompany and console him throughout his career. When he was only fourteen tragedy entered his life. He was called out of school and taken home to find his father lying dead: the doctor had been thrown with his groom from his gig when on his professional rounds, visiting patients, hit his head against the kerb-stone and never recovered consciousness.

Morell was the eldest of eight young children (another had died at a very early age) and, to bring up her family, his mother, a woman of education and determination, set up what proved to be a successful school. Like many another doctor's son, Morell's ambition was to follow in his father's footsteps, but he insisted on accepting his responsibilities as the head of the orphaned family, and at the age of sixteen he left Dr. Greig's school and, through the introduction of a family friend, became a junior clerk in the office of the Union Assurance Company, in the City of London. Stratford, three miles from his home, was the nearest point then reached by the railway, and young Mackenzie, always with a book under his arm, trudged daily on foot to and from the station. The medical profession was still his dream, and several evenings a week he attended classes in natural history and chemistry at King's College, and used to be called by his sister at five o'clock each morning, in order to obtain a couple of hours for reading before starting for his office. Mackenzie, it must be confessed, felt no call from suffering humanity to devote himself to medicine as a vocation. Ambition to make a successful career was what urged him on, and the most powerful of all stimulants, the spur of necessity.

"What would you have done," asked a friend in later life, "if you had not become a doctor?" "I don't exactly know," answered Mackenzie, "I think I should have become a writer. I would have made myself known somehow."



Morell Mackenzie's birthplace at Leytonstone.

At this point his fortunes took a turn for the better. His mother had a sister, Miss Harvey, who conducted a prosperous girls' school at Notting Hill, and when she heard from her widowed sister about the ambitions of her industrious, studious, and serious-minded eldest nephew, she offered to help, and lent him the money to pay his fees so that he could leave his office

stool and enrol as a medical student at the London Hospital. He worked well in the hospital wards—Sir Andrew Clark, the senior physician to the hospital, described him in a testimonial as “one of the most distinguished pupils of the London Hospital”, and Sir Jonathan Hutchinson, the senior surgeon, spoke of Mackenzie as being “at once remarkable for originality of mental endowment and for energetic zeal in the pursuit of knowledge”—and he won the senior gold medal for surgery and the senior gold medal for clinical medicine. He also developed his taste for polemics, for he took a prominent part in composing a letter to *The Lancet* from the medical students of the London Hospital, protesting that the dispenser had usurped one of their privileges, the drawing of patients’ teeth. “The hospital committee,” ran the letter, “altogether disregarding the interests of the students, and the claims of humanity, have transferred one branch of our studies to an officer of the institution, who will now have to perform the onerous but anomalous duties of a butler, dispenser, and dental surgeon.”

In 1858—the year that saw the reformation of the unorganized medical profession by the Medical Act which set up the General Medical Council—Morell Mackenzie took by examination the then usual “College and Hall” diplomas, Membership of the Royal College of Surgeons and Licentiate of the Society of Apothecaries, and so became qualified to practise; he was appointed in turn resident accoucheur and house surgeon at the London Hospital. To the ambitious young doctor with scientific leanings, in those days the career in the higher flights of the profession of medicine which made most appeal was that of a consulting physician; surgery was still in its infancy, not much advanced in essentials since the days of the Romans, and the mid-Victorian surgeons were strong men and skilled craftsmen, without any finer feelings and usually without any culture, possessing “the eye of a hawk and the heart of a lion”—“the hand of a lady” came in only after Lister. Although Simpson had introduced chloroform in 1847, Pasteur had not yet demonstrated the presence of bacteria in the air—that was to come in 1860, and Lister, who applied Pasteur’s teachings, did not introduce antiseptic surgery until 1867, and it reached London—from Edinburgh and Glasgow—only in 1877. To become a consulting physician in London it was—and still is—necessary

to take the advanced examination of Member of the Royal College of Physicians and certainly desirable, probably as necessary, to take the university degree of M.B. or its higher stage, the M.D. Only doctors who held such qualifications would be considered for the honorary appointment of assistant physician to a teaching hospital in London, for which there was keen competition because of the prestige and the connection to be gained by training the students—the next generation of doctors—and this was the only gateway to consulting practice. Medical education in London consisted chiefly in anatomical dissections and “walking the hospitals” and was deficient in the systematic teaching of medicine; it was considered, therefore, at that time, that the best training for the higher qualifications was to be found in the crowded clinics of Paris and Vienna, at each of which there was a group of brilliant teachers. Again Mackenzie’s benevolent aunt came forward and sent him for a year to Paris and for another year to Vienna and Budapest, together with brief visits to Berlin and Italy.

In Paris Mackenzie frequented the clinic at the Salpêtrière of Charcot, the greatest neurologist of the day, famed for his masterly descriptions of nervous diseases and his dramatic cures of hysterics, but at the same time a careful research worker, who said that “on entering the laboratory, one should divest oneself of the imagination as one does of an overcoat”. He sat at the feet of the modest and friendly Nélaton who, among other contributions to surgical technique, improved the treatment of naso-pharyngeal tumours. He also studied under Troussseau, a vivid and picturesque lecturer, the first to give an accurate description of laryngeal tuberculosis and the first in Paris to practise tracheotomy; and under Bretonneau, who gave diphtheria its name and identified it with the old “malignant angina”. His chief friend in Paris was a young law student named Vautrain—in after years the President of the Municipal Council of Paris—with whom he frequented the cheapest seats of the theatres and dined in the little *restaurants des sous-officiers*.

Then on to Vienna, which in the middle of the nineteenth century had become the leading centre of clinical medicine in Europe, mainly because of the concentration of systematic medical teaching at the great General Hospital. The chief

founder of the school was Rokitansky, then at the height of his reputation; he had already performed twenty thousand post-mortem examinations and on the basis of his careful observations had become the greatest of descriptive pathologists, particularly interested in disease of the lungs and the larynx. He insisted that pathological anatomy was the essential basis upon which all clinical knowledge of medicine must be founded, developed and perfected—a thesis which had a profound effect upon the mind of the young Mackenzie. Another inspiring teacher was Skoda, the great teacher of the importance of diagnosis, to which all treatment must be held to be secondary—in fact, he was inclined to advise that in acute diseases it was best to withhold any treatment; Skoda's chief fault was in his fondness for making a lightning, showy diagnosis, which subsequent necropsy did not always confirm. Mackenzie also attended the clinic of Oppolzer, the best all-round teacher in Vienna, noted, like Skoda, for his quickness in off-hand diagnosis, and studied the treatment of syphilis under Sigmund. His aim, both in Paris and Vienna, was to gain a sound, wide, all-round knowledge of medicine, in order to fit himself for his chosen career of consulting physician. But in Budapest, in 1859, destiny awaited him, for there he encountered Professor Czermak and the newly invented laryngoscope—the simple yet magical mirror that showed for the first time to the eyes of man the interior of the larynx and the working of the vocal cords.

## II

The history of the laryngoscope began one sunny afternoon in September, 1854, when Manuel Garcia, a Spanish singing-teacher who lived and taught in London, was on holiday in Paris (where he had been a professor at the Conservatoire until 1848) and, strolling in the garden of the Palais Royal, observed the flashing of the sun on the window-panes of the quadrangle. Preoccupied with the problem of how to see the movements of the vocal cords, an idea which he had often repressed as quite unreasonable, he suddenly had a vision of one mirror reflected in another. He hurried off to his friend Cavaillé-Col, the Parisian organ-builder, and asked him where he could find an instrument-maker who supplied mirrors.

Cavaillé-Col sent him to Charrière, the surgical instrument-maker, who was able to sell him for six francs a small dentist's mirror with a long handle that had been exhibited without success in London at the Great Exhibition of 1851. Impatient to try the experiment, Garcia ran to his hotel, obtained a hand-mirror, warmed the little mirror in hot water, dried it, and placed it against his uvula. Then, flashing a ray of sunlight upon its surface with the hand-mirror, he was thrilled and overjoyed to see reflected in it the interior of the larynx and the vocal cords wide open, so fully exposed, indeed, that he could see part of the trachea. When his excitement had somewhat subsided, he began to study what was passing before his eyes; and the way in which the vocal cords opened and shut and moved in the act of phonation filled him with wonder.

Garcia did not realize that this was the birth of a new surgical specialty and a landmark in the history of medicine. He had studied the anatomy of the larynx on the cadaver under Larrey, Napoleon's surgeon, but the physiology of the voice was what chiefly interested him and in 1840 he had presented his *Mémoire sur la voix humaine* to the French Institute. What he saw now was interesting to him as a physiological phenomenon; as such he described it in a communication to the Royal Society of London in 1855, which was commented on in the *Gazette Hebdomadaire de Médecine et de Chirurgie* of Paris, and so came to the notice of some foreign physicians and physiologists, in particular Professor Ludwig Türck of Vienna. Garcia had predecessors, unknown to him, who occasionally tried to examine the throat with a mirror; Morell Mackenzie was mistaken, however, in suggesting some years later in his book on the laryngoscope that Celsus in the Augustan age used a dental mirror, which might have been used to look further back—he possibly mistook the word *specillum*, a probe, for *speculum*, a mirror; and also that Levret, an eighteenth century French surgeon, used a polished steel plate for looking down the throat—it was a polished steel tongue depressor. Bozzini of Frankfurt (1804), Senn of Geneva (1872), Babington of London (1829)—who lived to be present at the first annual meeting of subscribers to Morell Mackenzie's throat dispensary in 1864, Baumès of Lyons (1838), Liston of London (1840), Warden of Edinburgh (1844), and Avery of London

(1844), all made attempts, without much success, to examine the larynx with a mirror or a prism, and Avery was so far advanced as to make use of artificial light. The idea, therefore, had been in the minds of many before Garcia's successful demonstration; but Türck afterwards, in 1866, asserted that he had hit on the idea of the laryngeal mirror without having known anything about a predecessor; reference, however, to Türck's pamphlet published in 1860 shows a mention of his debt to his predecessors Liston and Garcia, though he insists on his own priority to Czermak.

Türck employed laryngeal mirrors in the wards of the General Hospital in Vienna in the summer of 1857, but he trusted to the sunlight for illumination and by the autumn had put aside his mirrors as useless, saying, in the communication he published in April, 1858, that he was "far from having any exaggerated hopes about the employment of the laryngeal mirror in practical medicine". Professor Johann Czermak of Budapest, in November, 1857, borrowed Türck's mirrors "for physiological purposes" and, with the aid of artificial light, achieved success with them. In March, 1858, he read an important paper on laryngoscopy before the Academy of Sciences of Vienna, in which he gave full credit to Garcia for the introduction of the instrument. He pointed out that both Türck and Garcia had employed sunlight, while he himself had made use of lamp-light, and advocated the use of a large perforated concave mirror for reflecting either the sun or artificial light. He also improved the laryngeal mirrors by making them in a larger size and did away with an awkward hinge which they had at first. In a later publication he claimed—quite correctly—that but for his invention of the reflecting mirror "laryngoscopy would have been a dead-born child".

Less than a fortnight after his first publication Czermak gave a demonstration of the laryngoscope at a medical meeting in Vienna; Türck was present at this meeting and claimed priority as the first to use the mirror in the diagnosis of disease, which Czermak admitted. Both Türck and Czermak, with increasing ill-feeling, wrote many articles and pamphlets on the subject and gave demonstrations all over Europe, visiting Paris and London in 1861. In his claims for priority Türck went so far as to threaten Czermak with a legal action in the High Court

of Vienna. Czermak was fortunate in possessing a large larynx and an insensitive pharynx, with small tonsils, and demonstrated laryngoscopy with great ease on his own throat to excited and enthusiastic audiences of doctors.

It is true to say that, while Garcia invented laryngoscopy—the examination of the larynx, and Türck was the first to apply it to medicine, Czermak developed the laryngoscope into a practical surgical instrument of precision and popularized it with the medical profession. It is pleasant to be able to record that Garcia lived to be recognized as "the father of laryngology"; on his one hundredth birthday King Edward VII invested him with the C.V.O., the Spanish Ambassador decorated him with a royal Order from the King of Spain, in the crowded hall of the Royal Medical and Chirurgical Society he received addresses from the Royal Society

and from universities and learned societies all over the world, and the London laryngologists and other friends and admirers gave him his portrait painted by Sargent. He died in London at the age of 102.

The Laryngoscope.  
Woodcut from Morell Mackenzie's "The Use of the Laryngoscope," 1865.



### III

When Morell Mackenzie returned from the Continent he was appointed Resident Medical Officer—the senior interne post—at the London Hospital, and then, when he had served his term of office, Resident Medical Officer at the Tower Hamlets Dispensary, in the Commercial Road. He had brought his laryngoscope back with him from Budapest and began to direct more and more attention to those patients afflicted with diseases of the throat. When attached to the Dispensary he had to visit poor patients in their own homes in the East End—the squalid, wretched East End of the 'sixties—and was in the habit of

producing a toy from his coat-tails when visiting a sick child and promising to give it to him as soon as his throat had been examined. All his scanty leisure was devoted to devising new instruments to be used in conjunction with the laryngoscope—one of Mackenzie's most fundamental and valuable contributions to the technique of laryngology is that he altered the angle of all laryngeal probes, forceps, and other instruments from the wide curve of the German instruments to the right angle which more accurately reaches directly into the larynx from the mouth. Mackenzie himself, however, never attached much importance to claims for the introduction and invention of instruments.

He graduated M.B. of London University in 1861 and M.D. in 1862, and became Medical Registrar to the London Hospital, the usual stepping-stone to the honorary medical staff. In 1862 he started private practice in a small house at 64, George Street, Hanover Square—on the outer edge of the medical quarter that in those days comprised Savile Row, Hanover Square, and Cavendish Square rather than the present area around Harley Street—his sister Agnes acting as his housekeeper, though an early marriage was in prospect. Educated at a suburban private school which he had left prematurely, without the advantages and connections of Oxford or Cambridge enjoyed by most London consulting physicians, without social influence or financial security, and with a large family who looked to him for help (which in due course was to be given in abundance), Morell Mackenzie plunged into the severe struggle of the practice of medicine in the West End of London armed only with supreme confidence in his own training, intelligence, and ability. In 1863 he was awarded the Jacksonian prize of the Royal College of Surgeons for his essay "On the Pathology and Treatment of Diseases of the Larynx: the diagnostic indications to include the appearance as seen in the living person". The manuscript of this bulky "essay", stoutly bound in three volumes, with an appendix, is preserved in the library of the Royal College of Surgeons, and is notable not only for its important original observations but for the admirable water-colour drawings by the author, some of the first representations of the human larynx as it appears during life.

One day in the spring of 1863 Mackenzie said to his sister: "Agnes, if I am ever to make anything of the throat, I must see

more patients. Put on your things and come out with me and I will tell what I shall do." Brother and sister walked round the maze of small streets behind Oxford Street, Regent Street, Leicester Square, and Soho, looking for premises on a ground floor that might be suitable for a dispensary. They found two rooms to let at No. 5, King Street (now Kingly Street) behind Regent Street, but when they went next day to the house agent they were told it was necessary to take the whole house. Mackenzie had made up his mind that the locality was a convenient one so, nothing daunted, he took a lease of the house and fortunately found a sub-tenant at once for the upper part, leaving the ground floor for his dispensary. There was already in existence in central London a highly esteemed Metropolitan Dispensary for Diseases of the Ear, founded by Dr. James Yearsley in 1838 (it later became the Metropolitan Ear, Nose and Throat Hospital), so Mackenzie dubbed his the "Metropolitan Free Dispensary for Diseases of the Throat and Loss of Voice", and a bold placard with those words was placed over the windows. Carpenters, plumbers, and painters soon transformed the ground floor rooms into waiting-rooms with benches for the patients, a consulting-room, simply but adequately equipped for its special purposes, and a dispensary for medicines, throat paints, and sprays, most of the formulæ for which—many of them still in use—were devised by Mackenzie himself, in particular the use in sprays and inhalations of the essential oils, such as eucalyptus and pine.

A committee of interested friends was got together and an announcement of the opening of the Dispensary was printed and published broadcast. Drafted by Mackenzie, it ran as follows: "Formerly, when diseases of the throat were merely treated on general principles, it was easy to attend to such affections at the ordinary hospitals and dispensaries, but the progress of science and more especially the recent invention of the laryngoscope have added so considerably to our knowledge of throat affections, that a special dispensary for their treatment is felt to be an urgent want in the metropolis. Till now, as it was impossible to see the condition of the larynx, it was equally impossible to treat it satisfactorily when diseased, but now 'the eye directs the hand', and a new era in the treatment of throat affections has commenced. The introduction of the

stethoscope led to the more accurate investigation of pulmonary affections, and statistics testify to the immense amount of relief which the hospitals for diseases of the chest have afforded to the poor of London. The time has now arrived for the establishment of a dispensary for the treatment of throat affections. By the institution of such a charity the projectors hope to secure to the poor the advantages already enjoyed by the rich."

Unlike the majority of the great general hospitals, which were charitable and usually well-endowed foundations, most of the famous special hospitals in London, such as the Royal Ophthalmic Hospital, Moorfields, the Hospital for Sick Children, Great Ormond Street, the Royal Orthopædic Hospital, were founded, like Mackenzie's dispensary, by a doctor interested in a particular type of disease, because the facilities available in the large general hospitals were extremely limited, special departments in the general hospitals being a comparatively recent development. It was suggested that the doctors who established the special hospitals considered them chiefly as a legitimate form of advertising "which presented the great merit of being done largely, if not entirely, at the expense of other people", and they were all established in the face of great opposition from the orthodox general physicians and surgeons of their day. The facts that the special hospitals became centres where ideas were exchanged and considered, that the advances in the various specialties emanated from the special hospitals and not from the elementary teaching in the general hospitals, and that they were—and still are—the only schools of post-graduate teaching (for qualified doctors) as opposed to undergraduate teaching, were conveniently ignored. The contemporary *Lancet* sneered at Moorfields, now the acknowledged centre of post-graduate teaching of ophthalmology in the world, in the following words: "The business was so well managed that this infirmary shop was opened for the reception of gulls—and three years afterwards the proceedings of the ophthalmic warehouse were laid before the public." In the same way the laryngoscope was at first ridiculed as a "toy", then declared to be useless, and *The Lancet* gravely asserted that "without its use throat diseases were perfectly well treated by every general hospital in London"—although the recognized method for both acute and chronic diseases of the larynx in the immediate pre-laryng-

scopic years was to swab out the throat quite blindly, at most merely the upper surface of the epiglottis, with a solution of silver nitrate, and even that was an advance on previous methods. When Morell Mackenzie first projected a Hospital for Diseases of the Throat he was told by Sir James Paget, who nevertheless was an enlightened surgeon and one of the founders of scientific surgical pathology, that he might as well found a Hospital for Diseases of the Great Toe.

At first Mackenzie worked single-handed. After examining a patient in the consulting-room, he would slip into the side-room to make up the necessary medicine and hand it to the patient through a small, low window, above which his face could not be seen. The fame of the dispensary and of the young specialist in diseases of the throat quickly spread, patients flocked to the new institution, Mackenzie gave demonstrations there to doctors on the use of the laryngoscope, and persuaded friendly colleagues from the London Hospital—Mr. George Evans, surgeon, and Dr. Patrick Fraser, senior physician—to take charge of clinics, with qualified clinical assistants working under their direction. He joined the Royal Medical and Chirurgical Society (now the Royal Society of Medicine), the leading medical society in London, and spoke frequently at its discussions, when the subject touched upon—or could be made to touch upon—affections of the throat or the laryngoscope. He was a member of the Pathological Society—his name is prominent in its *Transactions* between 1862 and 1874—and the many cases which he showed were invariably worked out with great care and thoroughness. Like every other young consultant in those days he gave dinner parties at his house to which doctors—especially general practitioners whom he had known at the London Hospital—were invited, and his sister noted with pride that they listened with respect to the opinions of Morell, “and he the youngest of them all, and isn’t it nice!” He boldly persuaded his future father-in-law, Mr. John Bouch, a prosperous merchant of Cheapside and of Bickley Park, that his future was secure; and in 1863 he married the beautiful Miss Margaret Bouch, who was to become the mother of two sons and three daughters.

Mackenzie did not at this time call himself a laryngologist or specialist in diseases of the throat—he was a consulting physi-

cian, albeit with a special interest in and experience of diseases of the throat. Nor were diseases of the ear at that time usually combined with diseases of the nose and throat, except in the case of Dr. James Yearsley, the pioneer ear, nose and throat specialist, who was the author at the same time of a book on deafness and another on the art of laryngoscopy. Even as late as 1919 Sir Felix Semon, who was a laryngologist only, was protesting—according to his autobiography—against the prevalent tendency to combine laryngology with otology. Laryngology was, indeed, long looked upon as a specialty associated with medicine rather than surgery, and until about the beginning of the twentieth century laryngologists appointed to the great teaching hospitals of London had to hold the qualification of Member or Fellow of the Royal College of Physicians and not—as they invariably do now—Fellow of the Royal College of Surgeons. The extent of the treatment by laryngologists of diseases of the throat in the 'sixties—and indeed for the next quarter of a century—was limited to the opening of abscesses, the removal of tonsils, and the endo-laryngeal removal of polypi and other small tumours from the larynx. Caustic, astringent, or sedative solutions were applied to the larynx with a camel's-hair brush, or syringed or sprayed into it, or astringent or sedative powders were puffed in by an insufflator. Functional or hysterical loss of voice was treated by applying the galvanic current to the vocal cords with a special instrument. The diagnosis between simple chronic laryngitis, syphilis, tuberculosis of the larynx, and malignant disease (intrinsic or extrinsic cancer of the larynx), was always difficult and sometimes impossible, even for an experienced laryngologist. To-day in a doubtful case he might have the sputum examined for tubercle bacilli, have the chest X-rayed, have a Wasserman test of the blood, or remove a small portion of a tumour for microscopical examination; but Koch did not discover the tubercle bacillus until 1882, Röntgen discovered X-rays in 1895, and Wasserman discovered his test for syphilis in 1906, so that the mid-Victorian physicians had to depend solely on their clinical acumen and experience. A very large number of the cases of chronic laryngeal disease at the Throat Hospital in its early days were tuberculous, and Morell Mackenzie himself stated that of the first 10,000 cases 1,145 were syphilis of the throat—probably an under-estimate in those days,

for at St. Bartholomew's Hospital, in 1879, 48 per cent. of Paget's out-patients had disease of venereal origin.

Since the local anaesthetic properties of cocaine were discovered only in 1884 the manual dexterity of the early laryngologists and especially of Morell Mackenzie—whose technical skill was outstanding—had to be well-nigh miraculous. According to Semon—certainly an unbiased witness—Mackenzie would remove at the first attempt a laryngeal polypus from an absolutely unanaesthetized patient. External operations on the larynx had been carried out by surgeons, sometimes with success, long before the era of Listerian surgery: Dessault of Paris is said to have opened the larynx about 1810 and Brauers of Louvain in 1833. Gurdon Buck of New York in 1851 performed thyrotomy (splitting the prominent cartilage of the larynx) to remove an intrinsic cancer of the larynx and his patient lived for a year. Patrick Heron Watson of Edinburgh in 1866 performed laryngectomy (total removal of the larynx); but the operation in this case was done—mistakenly, of course, in the light of modern knowledge—for syphilis of the larynx, not cancer, and the patient died of pneumonia. Billroth of Vienna in 1873 was the first to remove the larynx for cancer, but recurrence and death took place in a month; actually the first larynx ever removed by Billroth was found, when the larynx was split open, to be tuberculous, not cancerous. Such an extensive operation as laryngectomy was then and for long afterwards performed by general surgeons, and not by the physicians who specialized in diseases of the throat and confined themselves to minor procedures. General surgeons did not then appreciate the bad effect of extensive damage to the tissues and were accustomed to a technique founded on their anatomical dissections, making huge flaps and laying back layer after layer of the tissues. Although the principles of Lister's antiseptic surgery were well known both in London and on the Continent by the 'eighties, the technique was inexact and imperfect, especially when—as in laryngectomy—a surgeon was dealing with the inevitably infected food and air passages.

Mackenzie published his lectures to doctors in the form of pamphlets, *On the Treatment of Hoarseness and Loss of Voice* (1863), and *On Enlarged Tonsils, and their Treatment without Cutting* (1864). In 1864 he passed the examination—in cultural

as well as medical subjects—of Membership of the Royal College of Physicians, and in 1865 he published his first book, *The Use of the Laryngoscope in Diseases of the Throat*, which soon went into three editions and was at once translated into French.

In 1865 Mackenzie moved his dispensary to 32 Golden Square, the name was changed to the Hospital for Diseases of the Throat—the first hospital of the kind in the world—and some beds for in-patients were provided. In September, 1866, he was appointed assistant physician to the London Hospital in the face of considerable competition. His Continental training, his Jacksonian prize essay, his pamphlets and his book, his appearances at the Pathological and the Royal Medical and Chirurgical Societies, his technical skill, his knowledge, his determination, and his pleasant manners had all impressed his seniors, and he received the influential backing of his old teachers Sir Andrew Clark and Sir Jonathan Hutchinson, of Sir William Fergusson, the leading surgeon of London, and Sir William Jenner, the leading physician, for many years the virtual dictator of the Royal College of Physicians. After his appointment Mackenzie visited the London Hospital twice a week to see medical out-patients, but without control of the wards; he also lectured to the students at its medical school for three years on physiology and for twelve years on diseases of the throat.

#### IV

A short time after his marriage Morell Mackenzie moved from George Street into Weymouth Street and then in 1870, when he was thirty-three and had a rapidly increasing practice, he suddenly took a lease of No. 19, one of the largest houses in Harley Street, the terms of the lease requiring that he should spend the sum of £3,000, “and more if need be”, on repairs, alterations, and decorations. On the ground floor there were two consulting-rooms, a laboratory-dispensary at the back, and a huge waiting-room in front, its ceiling supported by two pillars with gilt capitals; on the first floor a handsome pair of drawing-rooms stretched right across the house. When Mackenzie first showed his wife her new suite of drawing-rooms, his injunction astounded her: “My dear, now you have a new duty in life: fill these rooms!” The Mackenzies soon became known for their

dinner-parties and at-homes, though they were by no means "lion-hunters" or seekers after the aristocracy or the wealthy. At his wife's "afternoon" once a week the rising musical and dramatic stars of London sang and played informally, though the busy physician was seldom present. After the theatre or the opera he and his wife gave frequent musical receptions and suppers, often attended by the most famous actors and opera-singers of the day—Henry Irving and J. L. Toole, the Bancrofts and Ellen Terry, Pinero and Tree, Corney Grain and George Grossmith, Patti and Nilsson, Sims Reeves and Foli, James McNeill Whistler and other painters, Edmund Yates of *The World* and other journalists, barristers, politicians, and other friends and acquaintances.

Greville Macdonald in a letter to his mother describes a dinner-party with not too unkind malice: "Mrs. Morell Mackenzie is a very pleasant woman—handsome and finely built. She dresses well, though she is constantly fingering her showy bracelets and necklaces. They have a dinner-party every night—at least a dozen guests. I have been twice. As a rule when everyone is laughing Morell looks up and around with a solemn face, as much as to say, 'I see the joke, but Morell Mackenzie smiles not'. If he does unbend as far as to straighten his lips and elevate their corners, he looks about from one to the other, as one who should say, 'I smile, and Morell Mackenzie smiles; Morell Mackenzie and I are one—more, I created Mackenzie and saw that he was good!' I have never seen a more self-satisfied man; still, no one can help admiring and loving him."

Mackenzie had some reason for his satisfaction, for if his drawing-rooms were crowded, so were his consulting-rooms and waiting-room. All who knew him testify to his kindness and his charm as well as to his unparalleled manipulative skill and enormous powers of work. In 1873 he was appointed full physician to the London Hospital, with charge of wards, and would doubtless have been elected in due course a Fellow of the Royal College of Physicians, if he had not resigned from the hospital a few months later because of his complete devotion to his specialty and his already immense private practice. He continued, however, to lecture at its medical school on diseases of the throat for some years afterwards.

The Hospital at Golden Square now had twenty beds for in-

patients, an operating theatre, a house surgeon, an honorary staff of skilful laryngologists, with a distinguished array of consulting physicians and consulting surgeons, a royal patron, and an enthusiastic committee of management—all under the thumb of Morell Mackenzie. In ten years it had relieved 37,859 outpatients and 949 in-patients, and in the tenth year of its existence its annual income was nearly £6,000. Although it had been started as a free dispensary, Mackenzie early advocated the wholesome principle that its patients should contribute to the upkeep of the hospital according to their means, and it was thus the first hospital in the country to adopt a system now practically universal in England, although in 1878 the Hospital Sunday Committee of London withdrew its grant to the hospital because of this very provident principle. It also achieved a reputation as a centre of post-graduate teaching unsurpassed in Europe, and every ambitious young doctor who intended to specialize in laryngology sooner or later found his way to it. Semon in 1875 noted that the number of patients seen at Golden Square in one week considerably exceeded the combined number of all the patients seen in the hospital throat departments of the famous teachers von Schrötter, Stoerk, and Schnitzler at Vienna, during the same period. Over 2,300 doctors had been post-graduate students or attended the clinics of the hospital in its first ten years. Differences, however, arose between certain members of the hospital committee, the secretary, the matron, and Mackenzie, between 1876 and 1878; much of the trouble arose from a vendetta against Dr. Felix Semon (who was a German Jew, with a German but not an English medical degree), for whom Mackenzie stood up firmly, although the affair ended in the Prince of Wales resigning the office of Patron. Following the quarrels, resignations and an enquiry, Mackenzie thereafter took little part in the administration of the hospital, retaining only the appointment of Consulting Physician.

In 1877 Morell Mackenzie's remarkable mother died. Haweis, Mackenzie's biographer, describes her in these words: "A woman of great liveliness and ability, a ready and entertaining talker, a first-rate manager, a devout soul withal; over-zealous at times that others should do their duty and profess correct opinions on all religious and social questions upon which she might happen to feel strongly herself; a woman not to be talked over or talked

down, with a tendency to have a finger in every pie; whose advice was often given unasked, and was not always acceptable, but generally worth listening to, even when it could not be taken." She idolized her son, who in turn worshipped her with tenderness and liberality that knew no bounds up to the day of her death.

In 1882 Morell Mackenzie visited America. He made an agreeable impression and was greeted everywhere with acclaim, for his hospital had become a place of pilgrimage for every American doctor with an interest in laryngology who visited Europe. Clinton Wagner, on his return from Europe in 1873, following the lead of Mackenzie, founded the Metropolitan Throat Hospital in New York and also introduced Mackenzie's hospital pharmacopœia; this hospital was for many years the only post-graduate centre for the teaching of laryngology in the United States. Also in 1873 Wagner founded the New York Laryngological Society, the first of its kind in the world—it was merged with the Section on Laryngology of the New York Academy of Medicine in 1885. In 1882 Dr. Rufus P. Lincoln was president of the Society and held a special meeting at his house, when Mackenzie gave an address on "Hæmorrhage after Tonsillotomy". Among those who took part in the discussion afterwards was young Dr. Bryson Delavan, who had had four unusual cases at hospital, and whose first attempt it was at joining in a scientific discussion. Mackenzie, in replying, with characteristic kindness referred to Delavan's prentice remarks as a "valuable contribution" and made a staunch friend who supported the cause of Mackenzie through thick and thin for the next fifty years.

## v

In 1871 Morell Mackenzie published an important—indeed, epoch-making—book expanded from his Jacksonian prize essay, entitled *Growths in the Larynx*, with reports and an analysis of one hundred consecutive cases treated by the author. He edited the *Pharmacopœia of the Hospital for Diseases of the Throat*, first published in 1872, successive editions of which have appeared up to the present day. Other books followed: *Diphtheria, its Nature and Treatment* in 1879, *Hay Fever and Paroxysmal Sneezing* in 1884 and a treatise in more popular

style, *Hygiene of the Vocal Organs*, in 1886, in which he discussed with vigour the problems of the vocal registers and voice production. All of these books were successful and the last, which proved immensely popular with teachers of voice production and singers, went into half a dozen editions in two years. Ever since his Jacksonian Prize Essay he had contemplated a textbook on diseases of the throat; this was begun in 1872, but progressed slowly, because of the many calls on the author's time and because of the changes due to the rapid development of the new specialty. A succession of his assistants helped him with historical notes and by searching the medical literature for reports of cases of interest. Among these assistants were Lennox Browne (who left him in 1874 to found the Central London Throat Hospital), Gordon Holmes (author of the first history of laryngology), Felix Semon (the first laryngologist to be appointed to a general hospital—St. Thomas's Hospital, in 1882—and afterwards the bitter opponent of Mackenzie), Greville Macdonald (afterwards Professor of Laryngology at King's College Hospital), Norris Wolfenden (who founded, along with Mackenzie, the *Journal of Laryngology* in 1887), John Nolan Mackenzie (afterwards of Johns Hopkins Hospital, Baltimore, the leading American laryngologist of his day), Charles Louis Taylor (probably the cleverest of them all, who was educated for the priesthood at Valladolid, studied medicine at University College Hospital, where he was house surgeon but never finished his medical degree, was fluent in half a dozen languages, and ultimately was sub-editor for many years of the *British Medical Journal*), James Donelan (President of the Section of Laryngology of the Royal Society of Medicine in 1918–19), and the ever-faithful Mark Hovell (who was to share with Mackenzie the ordeal of attending the Emperor Frederick III, and was later appointed aural surgeon to the London Hospital).

The first volume of *Diseases of the Throat and Nose* was published in 1880, and the second volume in 1884. When the first volume was ready, except for the bindings drying at the binders, a fire at the printers destroyed the lot, including type-forms and illustration blocks, and manuscript: but fortunately Mackenzie had preserved a set of the proof-sheets. The book was at once universally recognized throughout the world as a classical treatise, the standard textbook of laryngology, and was immedi-

ately translated into German (by Felix Semon, who intended it "as an excellent introduction for himself in Berlin" and added to it footnotes and a preface) and French (by E. J. Moure of Bordeaux and his assistants Berthier and Charazac). The *Deutsche Archiv für Klinische Medizin*, in reviewing the first volume, said: "We hardly know which most to admire—the vast opportunities for observation which the author has enjoyed, or the thoroughness, diligence, and impartiality with which he has handled the voluminous literature of the subject." The *Wiener Medizinische Presse* said: "To a clinical experience of quite exceptional range Morell Mackenzie adds an unusually wide acquaintance with medical literature, and he has not only the power of giving clear and logical expression to his ideas, but the far rarer gift of being able ungrudgingly to do full justice to the labours of his fellow-workers." Semon bears testimony that there was scarcely a page of the book that had not been re-written many times, every word and every expression was carefully weighed, the author endeavoured to reproduce "with how truly anxious an accuracy" the opinions of others, and solicitously tried to polish chapters that had long been finished. The two volumes not only covered the whole field of the specialty as it existed at the time of publication, but anticipated by their author's suggestions many advances that owed their inspiration to him. It was Morell Mackenzie who originated the terms "abductors" and "adductors" for the two sets of little muscles that open and shut the larynx, and in many instances Mackenzie was prophetic in his opinions and observations regarding diseases of the throat. The textbook, through Mackenzie's premature death, never went into a second edition, though there was one in course of preparation.

It is interesting to note, as indicating the particular importance at that time of syphilis of the throat, that the only discussion of a disease and its treatment in the preface of his textbook is that of syphilis. Mackenzie wrote as follows: "The views which I entertain as regards the use of mercury in syphilis will probably meet with some opposition, but having followed Professor Sigmund's practice in Vienna in 1859 and 1860, I became well acquainted with his views at an early period of my medical career, and a somewhat extensive experience in dealing with the constitutional phenomena of syphilis has since convinced me of

the truth of the fundamental views entertained by the eminent Viennese professor, viz:— (1) That specific anti-syphilitic treatment is only required when serious constitutional symptoms are present; (2) that specific treatment in the early stages does not ward off the later manifestations of the affection; (3) that local treatment, analeptic remedies, and hygienic measures are of the utmost importance; (4) that the disease itself, except under unfavourable circumstances, tends towards spontaneous cure; and (5) that the development of serious pathological changes depends on conditions inherent in the patient himself. These views have been sustained by Professor Sigmund with all his old energy in the recent edition of his well-known *Vorlesungen über neuere Behandlungsweisen der Syphilis*. It will, I hope, be understood that whilst employing iodide of potassium more frequently, I nevertheless consider mercury a valuable, and in some cases an indispensable, remedy in syphilis."

In 1884, at the International Congress of Medicine at Copenhagen, Morell Mackenzie was president of the Section of Laryngology, which was instituted for the first time and was attended by laryngologists from all over Europe and America, including Wilhelm Meyer (the discoverer of adenoids), Schmiegelow and Mygind of Copenhagen, Heryng of Warsaw, Bayer of Brussels, Schnitzler and Stoerck of Vienna, Fränkel and Krause of Berlin, Gottstein of Breslau, Schwartze of Halle, Moure of Bordeaux, Ingals, T. R. French, Nolan Mackenzie, Hooper, Daly, Rankin, Roe, Bosworth and Bryson Delavan of America, Felix Semon and Cousins of London. Mackenzie was unable to appear on the opening day until the afternoon, and meantime in the morning the chair was taken by Professor Schnitzler of Vienna. From the beginning it was evident that a German element, headed by Schnitzler and abetted by Semon and others, intended to carry on the meeting to their own advantage, to the exclusion of the Americans, and as each American rose to speak a German rose and caught the eye of the chairman. The Americans were on the point of withdrawing from the meeting altogether when fortunately Mackenzie appeared and at the afternoon session took the chair with full knowledge of the situation, promptly suppressed the German intrigue, and gave the American contingent proper recognition.

Louis Pasteur was present at this Congress as a guest of honour

and addressed the members at a great general meeting, giving an account of his discovery of the anti-rabic serum and his experiments with dogs—it was a few months before his successful inoculation of the boy Joseph Meister (who grew up to become porter at the Pasteur Institute, and committed suicide when the Germans entered Paris in 1940). Through his epoch-making discoveries of bacteria Pasteur's beneficent influence on laryngological practice was considerable, since up to this time the same camel's-hair brush was employed for patient after patient, little care being taken in cleansing it, as doctors were quite ignorant of the dangers—or even of the existence—of infection.

In addition to his medical books, articles, and lectures, MacKenzie was fond of writing in the *Fortnightly*, *Contemporary*, and other monthly reviews, then in their heyday, on such subjects as "The Use of Tobacco and its Effect on the Speaking and Singing Voice", "On Influenza", "The Use and Abuse of Hospitals", "Specialism in Medicine", and "The Reform of the College of Surgeons", which were unlikely to commend him to his more conservative colleagues. The consulting physicians and surgeons of London in the latter half of the nineteenth century, dominating medical practice from their respective Royal Colleges, could see no real need for specialists, but already various specialties had branched off from the main trunk of medicine. Even in America specialism was at first anathema, and Dr. J. Solis Cohen (later a laryngologist of international repute) was expelled in the 'seventies from the Philadelphia Academy of Natural Sciences "for daring to specialize and be known as a specialist in diseases of the nose and throat". Yet the ancient Egyptians, according to Herodotus, had specialist physicians for the different parts of the body, and the modern specialists arose as medical knowledge grew during the eighteenth century—first oculists, followed by obstetricians and gynaecologists, and then aurists. The first special hospital in England (Moorfields, for diseases of the eye) was founded in 1805.

A consultant or "specialist" is, strictly speaking, a doctor who is called in by a general practitioner or another consultant to give a second opinion and, if necessary, carry out some specialized technique or surgical operation beyond the recognized scope of the general practitioner. It is therefore the correct practice—

what is popularly known as "medical etiquette"—for a consultant to see only such patients as are sent to him by another doctor, and not to retain them as his own patients. Morell Mackenzie was—perhaps pardonably—vain of his unequalled skill and knowledge in diseases of the throat and contemptuous of the ignorance of his professional colleagues; he felt, too, that he was bound to attend personally to every detail of his patient's examination and treatment. Although he was frequently consulted by other doctors who sought his help in exceptional difficulties with cases, he had no qualms in treating the numerous patients who came to him direct. This independent attitude annoyed his colleagues and explained the antipathy to him of some of the leaders of the medical profession. When—as was sometimes inevitable—prolonged and expensive courses of treatment failed, some pointed in scorn to his social extravagances and refused to meet him in consultation. Others unkindly called him "the guinea-pig"—and ignored the facts that he had countless poor patients who paid him no fees whatever and that he never accepted fees from the Church or the Stage. James Donelan, who had seen the correspondence, tells the story of a clergyman who had been treated gratuitously for some months and then, in a temporary difficulty, borrowed £50 from Mackenzie; he repaid £15, and after an interval wrote apologizing for the delay in sending the balance on the ground that he had been getting married. Mackenzie at once replied releasing him from the debt and begged him to buy himself a wedding present instead of making further payments. H. R. Haweis relates that when he was collecting material for his biography of Mackenzie, and through the newspapers had invited correspondence, he received a heap of abusive letters about Mackenzie's rapacity and greed, but singularly enough they were all from medical men; out of the pile of letters from patients not one accused Mackenzie of extortion or even complained of his fees.

The Bancrofts tell the following story in their autobiography. During the run of *Caste* they received one night a message from the stalls that Dr. Morell Mackenzie would like to speak to them. He had been for years a friend, refusing at all times to receive any fee or reward, whenever sent for and however occupied his time might be, even to the extent of paying three visits a day. Mackenzie was brought round to the green-room



LARYNGOLOGISTS AT THE INTERNATIONAL MEDICAL CONGRESS,  
COPENHAGEN. 1884.

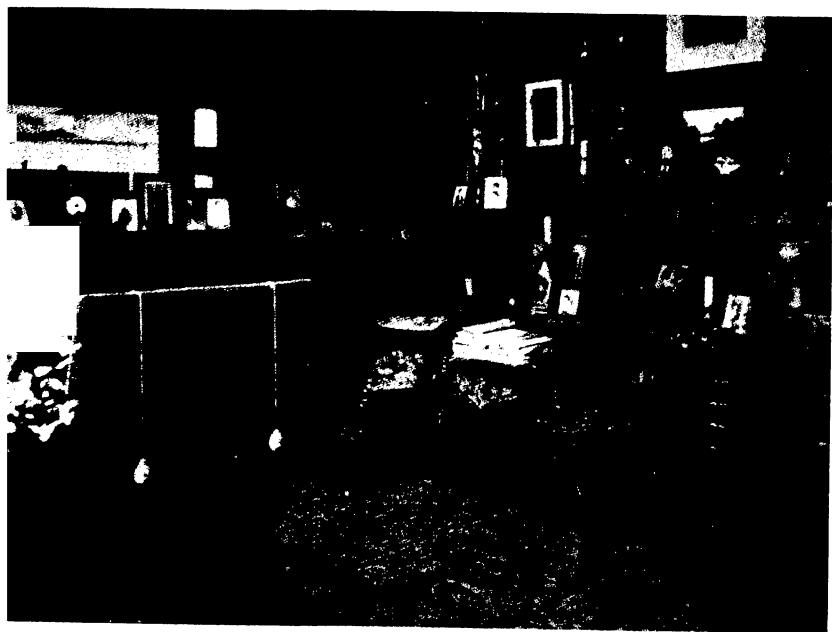
*Top row, reading left to right:* Bayer (Brussels), Wehmer (Frankfurt a.Oder), Hooper (Boston), Martel (Paris), Krause (Berlin).

*Second row:* Ribbing (Lund), Tidemann (Stavanger), Moure (Bordeaux), Cousins (London), Schaeffer (Bremen), Mantels (Hamburg), Daly (Pittsburgh).

*Third row:* French (Brooklyn), Rankin (Pittsburgh), Michael (Hamburg), Lange (Copenhagen), Böcker (Berlin), Roe (Rochester, N.Y.), Heryng (Warsaw), Gottstein (Breslau).

*Fourth row:* Schwartze (Halle), Semon (London), W. Meyer (Copenhagen), Morell Mackenzie (London), Schnitzler (Vienna), Fränkel (Berlin), Bosworth (New York).

*Bottom row:* Hedley (Middlesbrough), Schmiegelow (Copenhagen), Mygind (Copenhagen), Delavan (New York).



MORELL MACKENZIE'S CONSULTING ROOM AT 19 HARLEY STREET.

and startled them by saying quietly: "You have a dying man upon your stage, who is only fit to be in bed." Inquiries revealed that a minor actor, who only appeared as a servant for one minute in the second act of *Caste*, had been ill for some weeks, but was for so short a time in the theatre and kept his troubles so much to himself that the Bancrofts knew nothing of them. Mackenzie for a long while drove almost daily to a humble lodging in a remote part of London, where by no chance could he be likely to have other patients, to keep this one alive. He was patched up for a time through unceasing kindness; but his state was beyond the power of doctors to do more than let him enter another year, when his troubles ceased for ever.

The lady almoner of the Samaritan Society of the Hospital, too, related after Mackenzie's death that he was always ready to visit a sick patient in a poor locality who craved to see him. "Is it any good my coming?" he asked in one case. "None to her health," she had to answer, "but it would ease her mind." "All right, I'll come," said Mackenzie. Mewburn Levien tells of a clerk who consulted Mackenzie and after the second visit said that he could not afford to come again, as he was only a clerk in the City. Mackenzie was quite upset that he had charged a fee which his patient could not afford, said: "What you really need is a sea voyage," and there and then drove the clerk in his brougham down to a shipping agent and paid for a cabin for him in a ship going to the West Indies. Greville Macdonald tells that when he was house surgeon at Golden Square Hospital he had a quinsy and swallowing became impossible. The matron sent for Morell Mackenzie, who came down at 11 p.m. and treated him so effectively that he was able to swallow a whole pint of soup jelly. "I felt," said Macdonald, "that the great Morell was an angel in a frock coat—and plenty of side on!"

Some of his colleagues complained that Mackenzie, especially in his later years, did not keep case-notes; this has been contradicted, however, by Donelan from his own personal knowledge. Mackenzie did not care for the card-index system, but he had been accustomed from his earliest days in practice to keep a record of the names of his patients, dates when seen, treatment ordered, and results, in large old-fashioned ledgers ruled with appropriate columns, so that they were not very readily avail-

able for reference; in addition, he always made special notes of any cases of exceptional interest. His private practice became so enormous so quickly that he was unable to organize it properly and any apparent discourtesies to doctors, neglects and oversights were bound to be multiplied; competent authorities, such as Semon and Delavan, state that Mackenzie's medical practice was in the 'seventies and 'eighties the largest and most important in the world. In spite of a somewhat autocratic demeanour, his tact and sympathy won for him the unswerving admiration of pupils, patients and friends. His professional outlook was conservative. Middlemass Hunt, the Liverpool laryngologist, told Mewburn Levien that Mackenzie was always in favour of mild rather than drastic treatment; he remembered taking a patient to him once fully expecting an operation to be advised, but Mackenzie said: "No, Nature often does curious things." In regard to the tonsils, Mackenzie (in advance of his time) insisted that mere size was not important.

## VI

Mackenzie always woke early, for he had had attacks of asthma since the age of eighteen, seldom had a really good night, and usually slept in a sitting position. He would generally be reading before seven o'clock, had an early breakfast, then went through his correspondence and dictated letters to his "amanuensis" or secretary—Charles Louis Taylor left him for the *British Medical Journal* in 1886 and was succeeded by Robert Nainby—a rare, if not unique, aide for a physician in those days. Mackenzie bought one of the first typewriters to cross the Atlantic, but neither he nor his secretary became accustomed to it and he found that patients disliked the "cold impersonal appearance of typescript", so that it was soon put aside. Nainby brought the natural resemblance of his handwriting to that of his chief to such a point that it was almost impossible to tell which had written any given letter. "Before you go, leave me some of my autographs," said Mackenzie once to Nainby. On one occasion a letter from the Empress Frederick had to be answered immediately and, as Nainby was not available, Mackenzie had to write his own letter. The result was a request from the Empress that Mackenzie should not again employ his secretary in writing to

her, and that he should, as hitherto, write himself. After having dealt with his correspondence Mackenzie would visit patients in nursing homes near or, in summer, take a short walk in Regent's Park or the Botanical Gardens.

Patients were seen at Harley Street from ten o'clock onwards, no fixed appointments were given, the large waiting-room soon became packed with patients, and it was said that the only chance of being seen early lay in a five shilling tip to the butler, unless the patient had a handle to his name or possessed one of Mackenzie's visiting-cards with "Admit at once" written on it. Towards one o'clock a pile of sandwiches was placed on the sideboard and the waiting and hungry patients helped themselves—but Mackenzie's enemies said that by that time their throats would be too dry to eat them. Nominally he was supposed to finish seeing patients by two o'clock, but frequently it would be four o'clock before the last one had been seen, and he had snatched a hasty lunch in his consulting-room between patients. His patients gone, he usually rested for a short time, dozing in an arm-chair or reading quietly, and then at four o'clock came the ritual of tea. Mackenzie was very particular about his tea, which was always made watch in hand and taken with a slice of lemon in it, usually with two or three members of his family around him. After tea he was out again, sometimes for three or four hours, seeing patients at their homes or in nursing homes, or paying a brief visit to the hospital. Fifty or sixty patients were seen in a day—old patients could be seen in five minutes, but new patients took twenty minutes to half an hour or even longer; they came from all parts of the world—Europe, North and South America, India, Australia.

Dinner came on his return, nearly always with a guest or two, frequently a formal dinner-party, though Mackenzie sometimes, when busy and tired, left the entertaining to his wife, who enjoyed it. He himself preferred a plain meal, with a glass of weak sherry and water, but sumptuous viands, rare delicacies, and the choicest wines were provided for his guests. In his earlier days he liked a cigar after dinner, but in later years he smoked only stramonium cigarettes, which helped to ease his asthma. He was accustomed strongly to deprecate cigarette smoking, especially by singers and speakers. In his lecture on "Speech and Song" he said: "Tobacco, alcohol, and fiery condi-

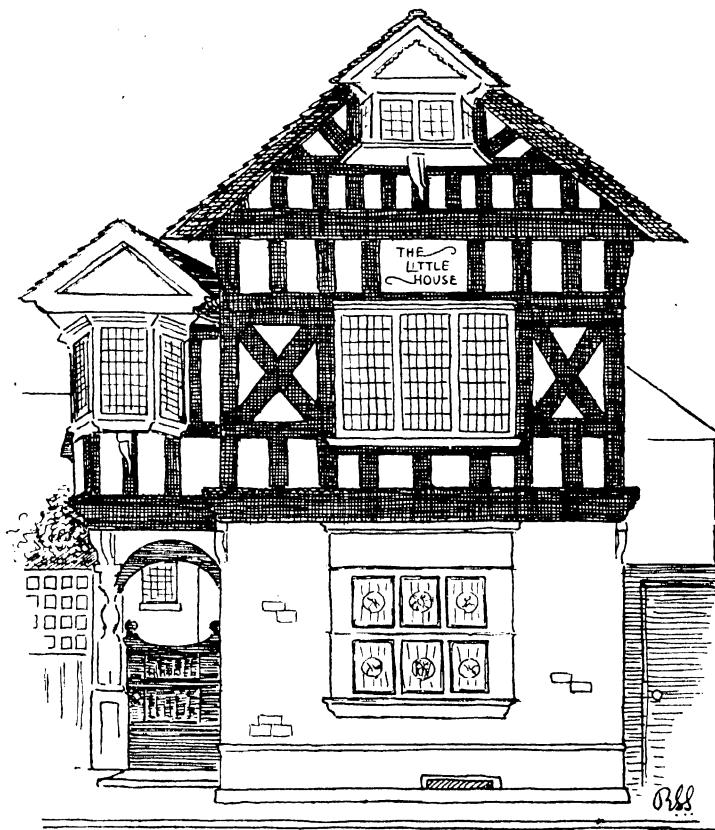
ments of all sorts are best avoided by those who have to speak much, or at least they should be used in strict moderation. I feel bound to warn speakers addicted to the 'herb nicotian' against cigarettes. Like tippling, the effect of cigarette smoking is cumulative, and the slight but constant absorption of tobacco juice and smoke makes the practice far more noxious in the long run than any other form of smoking. Our forefathers, who used regularly to end their evenings under the table, seem to have suffered little of the well-known effects of alcohol on the nerves, while the modern tippler, who is never intoxicated, is a being whose whole nervous system may be said to be in a state of chronic inflammation. In like manner cigarette smokers (those at least who inhale the smoke, and do not merely puff it 'from the lips outwards', as Carlyle would say) are often in a state of chronic narcotic poisoning. The old jest about the slowness of the poison may seem applicable here, but though the process may be slow, there can be little doubt but that it is sure."

After dinner, if he were tired, Mackenzie enjoyed a quiet game of chess, but nearly every night there was more work to be done, reading, dictating, or correcting proof-sheets, which lasted often late into the night. He was not fond of music or the opera, but few first nights of any importance at the theatre found him absent, for he had many friends as well as patients in the theatrical profession, one of his sons became an actor, and he had a family connection with the stage. His personal habits were simple, as is shown by the fact that up to the end of his life he was accustomed to go to the same modest tailor in Great Portland Street to whom he had gone when a young man.

Mackenzie enjoyed most of all his leisure hours with his family, old friends, or distinguished foreign guests at his country home at Wargrave. He rebuilt the house completely, personally supervising every detail, and he planted every creeper, flower, shrub and bulb in the garden. In his younger days he was fond of lawn-tennis, especially up at the net in doubles; latterly riding was his favourite exercise, and he also enjoyed rowing on the river with his daughters. He was always anxious that they—and all women—should have a profession or business and dreaded their becoming dependent on amusement, urging them to spend two or three hours a day on "solid" reading. He firmly believed—long before his contemporaries—that there was a field for

women in medicine, and considered that they should be particularly adapted to the more delicate specialties such as the eye, ear, and throat.

Mackenzie was an enthusiastic member of the Volunteers, served as surgeon to the Queen's Westminsters, went to camp with the regiment, attended parades and festive gatherings, sub-



The Little House, Wargrave.

scribed liberally to its funds, and was always ready to attend a sick comrade gratuitously. He was interested in art and greatly enjoyed taking his daughters round the famous galleries of Europe, for his early liking for foreign travel continued all his life. He was devoted to his family and his friends, extraordin-

arilly kind to his younger colleagues, but quick—no doubt from his Celtic blood—to resent disagreement or affront; yet he never allowed his sometimes strong personal dislikes to interfere with his appreciation of scientific truth.

Mackenzie's domestic expenditure was lavish, and his wife and family were refused nothing that money could buy. In the 'seventies he was earning £10,000 a year in fees, and in the 'eighties this increased to between £12,000 and £15,000 a year, at a time when fees were smaller than to-day (Mackenzie's usual fee was two guineas and often half that amount), operations were infrequent and on a minor scale, and the large operation fees of to-day were unknown. Journeys into the provinces constituted the chief source of the larger fees to the medical profession at that time, and consulting physicians, not surgeons, made the large incomes—Sir William Jenner and Sir William Gull, the leading Victorian physicians, each left over £300,000, but they were financiers as well as physicians.

Such was the prosperous, full, and interesting life of the leading London specialist in the 'eighties, during the golden age of Queen Victoria, when the government was merely the hardly dissimilar alternatives of Mr. Gladstone's or the Marquess of Salisbury's, with Mr. Parnell and the Irish Nationalists making themselves a nuisance in Parliament, the income-tax was six-pence in the pound, Bismarck in Germany was tinkering with the beginnings of social security but a State medical service was unimaginable, the doctors all wore whiskers, tall hats and frock coats, the consultants had begun to live in or around Harley Street because it was convenient for the railway stations, their houses were gay all spring and summer with flowery window-boxes, electricity had not yet displaced gas-light, physicians and surgeons wrote their letters with their own hands after dinner and nobody had a private telephone, a carriage and pair was the height of ambition and nobody had dreamed of a motor-car.

## CHAPTER THREE

### *THE PATIENT*

#### I

PRINCE FREDERICK WILLIAM of Prussia, afterwards the German Crown Prince and Emperor Frederick III, was born at Potsdam on 18th October, 1831, the eldest son of Prince William of Prussia (who became the first German Emperor) and Princess Augusta, when his grandfather, King Frederick William III, was on the throne of Prussia. He received a careful education at the hands of two tutors and the professors of the University of Bonn, and had a deeply religious nature, but it was traditional that the future King of Prussia had to learn the craft of arms in childhood, so at the age of seven and a half he presented himself to his father as a trained recruit and on his tenth birthday became a second lieutenant in the First Regiment of Foot Guards. In spite of the Liberal-minded attitude which he developed, fostered by his mother, who came from Weimar and had been a friend of Goethe, Prince Frederick William never forgot that he was first of all a soldier, whose destiny one day was to be the supreme War Lord of the Prussian Army. Lady Ponsonby describes him, at the age of twenty-four, as "a good-humoured, taking lieutenant, with large hands and feet, but not in the least clever". When on his travels he visited the Emperor Napoleon III at the Tuileries in 1856 the Empress Eugénie described him in a letter to Countess Walewska: "The Prince is tall and handsome, almost a head taller than the Emperor; he is slight and fair, with a straw-coloured moustache, a German such as Tacitus described, of chivalrous courtesy, with something of Hamlet about him . . . His companion, a General Moltke (or some such name) is taciturn, but by no means a dreamer." He travelled through Switzerland, the Tyrol, northern Italy, France, England, and Russia, von Moltke being attached to him as his aide-de-camp, under whose direction he studied closely the art of war. Some years later that keen observer, Queen Victoria, wrote of him to her Secretary, Sir Henry Ponsonby: "The Crown

Prince hates intrigue and is very straightforward and honest and kind-hearted, but rather weak and to a certain extent obstinate, not conceited but absurdly proud, as all his family are, thinking no family higher or greater than the Hohenzollerns. Not proud to those below him, that is, to the people, but proud and overbearing to other Princes."

It is not unusual for an heir-apparent to have Liberal sympathies attributed to him, but in the case of the Crown Prince Frederick the Liberal point of view was genuine and convinced. His liking for the English way of life dated from a visit to the English court at the time of the Great Exhibition of 1851, when he was able to contrast the happy domesticity of Windsor with the etiquette-ridden courts of Germany. He came at that time under the kindly influence of the Prince Consort, who advised him regarding the attitude he should adopt towards the people during their constitutional struggle, and strengthened his Liberal sentiments. Loyal as he was to the country of his adoption, the Prince Consort looked forward all his life to seeing a Germany united under the leadership of Prussia—he went so far as to write a pamphlet (afterwards withdrawn from circulation, so that not even Sir Theodore Martin, when writing his biography, could obtain a copy) entitled *The German Question Explained*, in which he put forward his scheme for a federated German Empire under a Prussian Emperor. Lord Aberdeen, according to Greville, spoke of the Prince Consort's views as "generally sound and wise, with one exception, which was his violent and incorrigible German unionism".

The Prince Consort's eldest daughter, Victoria, was his constant companion: an intelligent and even brilliant girl, her father was accustomed to discuss current international problems with her and read to her the long political letters he received daily from abroad. When she was still a young girl the subject of her marriage with the then Prince Frederick William of Prussia began to be mooted, and the Prince Consort saw in his daughter an instrument for the realization of his hopes for the future welfare of Germany. There is no reason to doubt that the marriage was one of true and deep affection, though it may be hoped that it was rather English life than the English princess with whom the Prince fell in love in 1851—as contemporary sentimentalists averred—when she was a plump child of

eleven. At any rate Queen Victoria stipulated that she must be confirmed before she was betrothed and not married before her seventeenth birthday. The suggestion was made from Prussia that the heir to the Hohenzollerns must be married in Berlin, but Queen Victoria wrote to her Foreign Minister that she would never consent to this, both for public and private reasons "and the assumption of its being too much for a Prince Royal of Prussia to come over to marry the Princess Royal of Great Britain is too absurd, to say the least . . . Whatever may be the usual practice of Prussian Princes—it is not every day that one marries the eldest daughter of the Queen of England". At that time, indeed, Prussia was no more than a second-class European power.

## II

When the Crown Princess arrived in Berlin in 1858 every Liberal in Prussia looked to the Anglo-Prussian marriage as a bulwark to the cause of freedom and national union, for England was still regarded as a model of political progress and achievement. The accession to the throne of William I had raised and then—with the call of Bismarck to Berlin—dashed the Liberal hopes, but the Crown Prince and Princess became a rallying-point for the Liberal movement. Their house, the New Palace at Potsdam, was frequented by the scientists Helmholtz (who did much more fundamental research work than merely invent the ophthalmoscope) and Virchow (a Liberal politician as well as the founder of modern pathology), the historians Ranke, Delbrück, and Treitschke, the great classical scholar and archæologist Curtius, the philosopher Zeller, and many other writers, professors, artists, and museum directors, besides the more politically-minded Bunsens, Stockmar (son of the Baron who was the confidant of the Prince Consort), Geffcken, Freytag, and the Liberal parliamentary leaders. Lord Clarendon, the Foreign Secretary, wrote from Berlin to Queen Victoria, in November, 1861: "Her Royal Highness is much alarmed at the state of things here and Lord Clarendon thinks with great reason, for the King has quite made up his mind as to the course he will pursue. He sees democracy and revolution in every symptom of opposition to his will. He will never, if he can avoid it,

accept the consequences of representative government, or allow it to be a reality."

Liberal tendencies in England convinced Bismarck that England was on the "downward course"—as she had been in many European eyes ever since 1815—and Bismarck's sacred duty was evident: to unite Germany, Austria, and Russia against England's "evil influences" if order in Europe was to be maintained. Bismarck mistrusted the English sympathies and influence of the Crown Princess and even suspected her German patriotism—the last most unjustly, for the Prince Consort (whose opinions were his daughter's) had always favoured the same fundamental policy of German unity under Prussian leadership. The Crown Prince's Liberal views were anathema to Bismarck; he suborned aides-de-camp and chamberlains to spy upon him, who reported distorted and imagined conversations, until an episode at Dantzig brought matters to a head. The Crown Prince, speaking in public at Dantzig in 1863, criticized a new law restricting the freedom of the press and emphasized that he had had no part in the deliberations which had produced it. The King was furious with the Crown Prince, who was nearly sent in disgrace to a fortress "for mutiny". He humbly asked for pardon and offered to resign all his offices—he did cease to attend the Council of State; but Bismarck intervened and advised the King against making a martyr of his son. In his later account of the incident Bismarck makes it plain that he knew the offending speech had been inspired by the Crown Princess, which was, in fact, true.

### III

Carlyle's *Frederick the Great* was published between 1858 and 1865, but the readers of that generation did not grasp the close resemblance between Frederick's Prussia and Bismarck's. Sir Robert Morier, as a young attaché at the British Embassy in Berlin and an old friend and connection of the Stockmars, became intimate with the Crown Prince and Princess, and for fifteen years his was a voice crying in the wilderness. Morier was hated and feared by Bismarck because he knew and told the truth about Prussianism, but, like Vansittart in the next century, he was distrusted at the Foreign Office in London because

He told his chiefs what they did not wish to hear. Years afterwards, when he was ambassador at Petersburg and the Berlin embassy fell vacant, his was the one name that was vetoed by Bismarck.

German historians have propagated the legend that between 1866 and 1870 poor Prussia was becoming encircled by a conspiracy of three hostile countries, France, Austria, and Italy, and that if war came it would be defensive against an unprovoked assault. In his memoirs, however, Bismarck quite frankly puts on record that in his view war with France was not only inevitable but desirable, not only to defeat France but to defeat Liberalism in Germany and achieve unification. By 1870 France was full of German spies, the German strategic railways were ready, and von Moltke had patrolled on foot the whole length of the Franco-German frontier. The ostensible cause of war was disagreement over the suggested succession to the Spanish throne, for a minor sprig of the Hohenzollern family was proposed to fill the vacancy. On 14th July the holiday-making crowds on the boulevards were shouting "*à Berlin!*," on 15th July King William of Prussia ordered a general mobilization, and on 19th July France declared war.

All Germany rallied to the standard of Prussia, for Bismarck's journalists had done their work well, and this was felt to be no war of conquest but a just war of defence against French aggression. For the first two or three weeks Europe confidently expected a French invasion of the Rhineland and a French victory, for Lebœuf had boasted that the army was ready "to the last garter-button". In rapid succession, however, came the German victories of Wörth, Spicheren, St. Privat, and Gravelotte, and on 2nd September King William, the Crown Prince, Moltke, and Bismarck met the sick and dispirited Napoleon III at a weaver's cottage on the Donchery road at Sedan, when an army of 100,000 men and 558 guns surrendered. The Crown Prince commanded the Third Army, composed of Prussians, Bavarians, Württemburgers and Hessians, and enhanced his reputation for tact and clemency. To the inhabitants of Nancy he issued a proclamation: "Germany is at war with the Emperor of the French, not with the French people. The population need fear no hostile measures—I trust that business and trade will revive, and that the authorities will remain at their posts."

At Toul he ordered that the Gothic cathedral should be kept well out of the line of fire. At Rheims he walked quietly about the streets and visited the cathedral with only one staff-officer, and gave instructions that no troops were to be quartered on the poorer inhabitants.

By the end of September General Headquarters had reached Versailles and the siege of Paris began. Bismarck continually quarrelled with the generals, who disputed his judgment in military affairs and refused to allow him to override the decisions of the General Staff. The delays in the bombardment of Paris annoyed him: his faithful diarist Busch records that "In Bismarck's opinion, first Queen Victoria and then, at her instance, the Crown Princess, and finally, the Crown Prince, persuaded by his Consort, will not have Paris bombarded; while the generals 'cannot' bombard the city out of consideration for the views of the Crown Prince, who will, of course, be the future King and will have the appointment of Ministers of War, commanders of army-corps and field-marschals". The people of Berlin hysterically demanded daily the bombardment of Paris, and Berlin society vilified the Crown Princess as responsible for its postponement. When at last the bombardment of Paris did begin—the postponement having been at the instance of the generals for entirely military reasons—Bismarck was impatient of the restrictions of international law and wanted to withdraw from the Geneva Convention, "which", observes Busch, "is impracticable!" Someone said that part of 1,200 prisoners that had been taken were *francs-tireurs*. "Prisoners," said Bismarck, as noted by Busch, "why do they continue to take prisoners? They should have shot down the whole twelve hundred, one after another." And again, when there was some difficulty in collecting a local indemnity levied by the Prussians: "The people should simply be told," said Bismarck, "that if you do not produce the taxes in arrear within two hours, we shall pitch some shells in amongst you."

After Sedan a provisional French government carried on, but Bazaine surrendered with 170,000 men at Metz in October, and Paris capitulated in January, 1871. Deliberately the German victors humiliated France—force was the only argument, generosity and pity were completely absent from the hearts of Bismarck and the generals. Afterwards Bismarck said that he

would have been content with Alsace and a strip of "German" Lorraine, and that the generals insisted on including the fortress of Metz, but the contemporary evidence tells a different story. Bismarck was quite as brutal and remorseless as any of the fire-eating Prussian generals; in his opinion a mutilated and revengeful France would be a perpetual reason for maintaining Germany in arms and would prevent Prussia from "falling asleep on the laurels of victory", as in 1786.

"The longer this struggle lasts," wrote the disillusioned Crown Prince with typically German self-pity in his diary on New Year's Eve, 1870, "the better for the enemy and the worse for us. The public opinion of Europe has not remained unaffected by the spectacle. We are no longer looked upon as the innocent sufferers of wrong, but rather as the arrogant victors, no longer content with the conquest of the foe, but fain to bring about his utter ruin. No more do the French appear in the eyes of neutrals as a mendacious, contemptible nation, but as the heroic-hearted people that against overwhelming odds is defending its dearest possessions in honourable fight. Nay, in their sympathy with France men go so far as to hate Germany. In this nation of thinkers and philosophers, poets and artists, idealists and enthusiasts, the world will recognize nothing but a people of conquerors and destroyers, to which no pledged word, no treaty concluded, is sacred, which speaks with rude insolence of others that had done it no hurt . . . True, we are indisputably the foremost people of the world in civilization, yet at the moment it must seem as though we are neither loved nor respected, but only feared."

## IV

Bismarck did not forget the goal for which he was ultimately fighting. The South German States had joined in the war with unanimous enthusiasm, but at Versailles personal feelings, ambitions, and intrigues created difficulties in the formation of a united Empire. King William had no desire for an imperial crown—the crown of Prussia was to his mind above that of an Empire, and he saw in the dignity of Emperor "simply a cross for himself to bear". The Crown Prince favoured the idea of an Emperor with an Upper House of princes and a representative

Lower House, and a ministry responsible to the chamber. But Bismarck promised Bavaria the concessions of control of her own army, railways and postal service, and persuaded the young King of Bavaria to copy out a letter to King William (as the Crown Prince notes in his diary) inviting him in the name of the German Princes and the Free Cities to take the Imperial Crown and exercise presidential rights over the Empire. Thus, instead of an Imperial representative government, autocratic Prussia absorbed Germany.

The Crown Prince takes credit in his diary for a large part in bringing about the formation of the German Empire, and it is true that his influence was possibly decisive in persuading the King; but the Empire which he visualized was not Bismarck's, and it was the latter which came into being in the *Salle des Glaces* at the Palace of Versailles on 18th January, 1871. King William I stood in front of a field altar at the central window, surrounded in a half-circle by thirty German reigning Princes and hereditary princes. The hall was crowded by deputations of Prussian and Bavarian non-commissioned officers and men carrying flags and standards, and by representative officers of all the German armies, each decorated with the Iron Cross. A chaplain read the abridged liturgy and offered "a simple prayer" contrasting the boastfulness of King Louis XIV of France, who had built the palace, with the modesty of the King of Prussia; the King read an address to the German sovereigns; and Bismarck followed with another to the German people. The Grand Duke of Baden stepped forward and called for cheers for His Imperial Majesty the Emperor, and as the welkin rang the new Reich was inaugurated. No one foresaw that William I, aged seventy-three, would reign for another seventeen years, guided by the increasingly dictatorial Chancellor Bismarck, now created a Prince, while the Liberal Crown Prince Frederick, appointed Protector of Public Museums, attended picture exhibitions and concerts, inaugurated national monuments and celebrated centenaries, visited England, Spain and Italy, educated his growing family, amused himself with his little farm at Bornstedt, and became middle-aged.

## V

In 1880, in his sixty-fifth year, Bismarck took over the post of Minister of Commerce in the Prussian Government in addition to his other offices, and next year began the programme of wide constructive measures of social reform which gained for him at one time the title of the Great State Socialist. But Bismarck was no socialist: he looked upon the rapidly increasing workers of industrial Germany much as a Prussian Junker looked upon the peasants on his estate, and assumed—for once incorrectly—that they would be more likely to give political support to a benevolent Conservative Party than to the Socialists or the Liberals. He persuaded the Reichstag that the cure for social evils was not solely in repression but in the promotion of the workers' well-being, and there followed in rapid succession his laws for State insurance against sickness, workmen's accidents, and old age and incapacity for work.

The Crown Prince Frederick, though always loyal to his aged father, would hardly have been human if he had not sometimes felt disappointed at having to wait so long for the Throne, for as he grew older he began to find it increasingly difficult to establish a position for himself. With his clever and ambitious wife at his side, he busied himself with plans for the future and his mind was full of Liberal ideas, but he had to watch Germany becoming apparently more and more Liberal without any help from him, while the Chancellor rose higher and higher in the esteem of the world. Bismarck at this period said that he was able to agree with the Crown Prince, but feared that that would never be possible with the Crown Princess. In his memoirs Bismarck records that in 1885, when the Emperor William's health was giving occasion for anxiety, the Crown Prince Frederick summoned him to Potsdam and asked whether, in case of a change in the Throne, he would remain in office. He declared that he was ready to do so under two conditions: no parliamentary government and no foreign influence in politics. The Crown Prince, with a corresponding gesture, answered: "Not a thought of that." Bismarck says that he could not assume that the Crown Princess had the same kindly feeling for him, but she shared with the Crown Prince the conviction that in the interests of the dynasty it was necessary that he should be main-

tained in office at the change of reign. It must be noted, however, that Bismarck's memoirs are less distinguished for their meticulous regard for truth than for their anxiety to impress posterity with what he wished should be remembered of him, and it can hardly be doubted that with a younger and more vigorous Emperor Frederick III "the pilot" would have been dropped even earlier than by his son in 1890.

## CHAPTER FOUR

### *THE ILLNESS*

#### I

IN January, 1887, the Crown Prince Frederick of Germany, then fifty-five years old, began to show evidence of slight but persistent hoarseness. It was assumed to be of catarrhal origin, for he had caught a severe cold in the north of Italy in the autumn of 1886, when one evening he went for a drive in the country and the coachman lost his way; it became dark and chilly, and the Crown Prince had no greatcoat with him. For the next month or two, however, no cough or other signs of catarrh were present and inhalations and other medicines for catarrh did not bring about any improvement in the hoarseness. On 6th March, 1887, therefore, Dr. Wegner, the Crown Prince's Physician-in-Ordinary, who was Deputy Medical Director-General in the German army, called into consultation Dr. Gerhardt, Professor of Clinical Medicine at the University of Berlin, who was also a well-known authority on diseases of the throat. On examination with the laryngoscope Professor Gerhardt found that the Crown Prince had, on his left vocal cord, a long, low, somewhat uneven pale-red little nodule, about four millimetres in length and two millimetres in height; the vocal cords moved quite easily in the act of phonation. The diagnosis he made was that of a polypoid thickening of the left vocal cord, for it was a thickening rather than an outgrowth from the vocal cord.

The treatment Gerhardt adopted was first, to get the patient's throat accustomed to the use of laryngeal instruments; then, having applied a twenty per cent. cocaine solution to the larynx, he attempted to remove the nodule with a snare—he was unaccustomed to the use of the laryngeal forceps—slightly bent to the right, grasping the left vocal cord from underneath. This brought away only a tiny fragment from the surface of the nodule, which felt rather hard to the touch. Later a ring-knife also failed, because of the flatness, smoothness, and hardness of the growth, so Gerhardt decided to try the galvano-cautery. He

burned away the greater part of the thickening, with the aid of cocaine, but eight days later it was larger than ever; he then applied the galvano-cautery daily from 29th March to 7th April. Although burning with a galvano-cautery thirteen times would not turn a simple tumour into a cancerous one, this daily application of the cautery was thoroughly bad treatment, which no trained laryngologist of any experience, even at that period, should have carried out, and it must have irritated and harmed the larynx. The surface did not heal after these cauterizations, so Gerhardt began to have a vague suspicion that this might be a cancerous growth and not a simple tumour, which he mentioned to Dr. Wegner. He noted, however, that both vocal cords moved equally freely, and this he considered a point against cancer, for at that time—and for many years after—lack of mobility in a vocal cord was considered one of the earliest signs of cancer in that region; it is now known to be a comparatively late sign of the presence of cancer of a vocal cord, caused by infiltration of the cancer into it, though it may also be due to other causes, such as inflammation or paralysis.

The Crown Prince was sent for two weeks to the spa of Ems, for rest to the voice, inhalations, and douches for the nose and throat, accompanied by the Crown Princess and Dr. Wegner. There the cough improved, the irritation, swelling, and redness of the larynx subsided, and his spirits were much better than at Berlin; he ate, slept, and looked well, though he was careful not to fatigue himself by long walks. When, however, the Crown Prince returned to Berlin on 15th May, Gerhardt did not find any signs of real improvement, the hoarseness was even more marked than before, the movement of the left vocal cord was somewhat more sluggish than that of the right, and the surface of the tumour, which was rather larger than before, was still not healed. The patient asked that the galvano-cautery should be applied again; Gerhardt recommended delay in order to have the opinion of another laryngologist, naming four in Berlin, but pressed first of all for consultation with a surgeon, in particular Professor von Bergmann, who was Professor of Surgery in the University of Berlin and President of the Association of German Surgeons. This was agreed to and the choice of a laryngologist was put off until von Bergmann could give his advice. Professor Gerhardt says that he did not try to influence von Bergmann's

opinion, but that Dr. Wegner took him to the Crown Prince on 16th May, when he examined the patient and immediately came to the conclusion that on account of possible cancer the operation of splitting the larynx (thyrotomy, or, as the Germans prefer to call it, laryngo-fissure) should be undertaken, for the purpose of exploration and thorough removal of the growth.

Professor von Bergmann, although an eminent surgeon, was no laryngologist and was unable to use the laryngeal mirror, so that he must have accepted the diagnosis entirely on the authority of Gerhardt. According to Dr. Wegner, von Bergmann said: "Gerhardt makes the diagnosis; I am only the operator." This was, of course, not an uncommon attitude as between physician and surgeon even later than the 'eighties. There was apparently some doubt at the time about the actual operation which Professor von Bergmann proposed to carry out, which the newspapers described as "excision of the larynx". Bismarck in his memoirs calls it "removal of the larynx", probably because of a layman's lack of appreciation of the great difference between "laryngotomy" (as it was then sometimes called), which is thyrotomy or laryngo-fissure—splitting the larynx from the front of the throat to gain access to its interior—and "laryngectomy", the much more formidable procedure of removal of the whole larynx. The Crown Princess, in writing to Queen Victoria (on 17th May), correctly speaks of "a growth that cannot be got at from inside the throat, as it may also exist under the larynx in a fold, where it cannot be reached"; Professor von Bergmann, she said, was for operating from the outside, "and you can imagine that this is not an easy operation or a small one". As she remarked afterwards to Morell Mackenzie: "It was to be an exploratory operation; but when once begun, it was quite uncertain where it would end." Von Bergmann certainly minimized unduly the importance of the operation, which he said was "not dangerous and in any case no more dangerous than an ordinary tracheotomy".

## II

After the consultation between Professors Gerhardt and von Bergmann on 16th May, Dr. Wegner brought up the subject of having a laryngologist in consultation also. Gerhardt said afterwards in his official report that von Bergmann and he

agreed to this as they considered that the laryngoscopic appearances and the history of the illness would convince anyone who knew anything about laryngology to come to the same conclusion. Several names were mentioned, in particular Moure of Bordeaux, the leading French laryngologist, Professor von Schrötter, the leading teacher of laryngology in Vienna, and Morell Mackenzie of London, the leading English laryngologist. After consideration of their respective qualifications Dr. Wegner recommended the choice of Morell Mackenzie, the German translation of whose textbook on diseases of the throat he possessed and knew to be used in the German medical schools. Professor Gerhardt had some acquaintance with Mackenzie, and he was known to be able to speak German fluently, so he was agreed upon.

Meanwhile Prince Bismarck found that arrangements were being made to perform an operation under chloroform upon the Heir-Apparent to the Throne without either the reigning Emperor or his Chancellor having been informed; in fact, the Crown Prince himself was not to be told until just before the operation. He placed his views about the impropriety of this before the Emperor, who intervened, and another consultation was ordered for 18th May, at which, besides Gerhardt, von Bergmann, and Wegner, there were present Dr. Schrader, Surgeon-in-Ordinary to the Crown Prince, His Excellency Dr. von Lauer, Physician-in-Ordinary to the Emperor William and Medical Director-General of the German Army, and Professor Tobold, a senior Berlin laryngologist, the two last having been sent specially by the Emperor. Professor Tobold examined the Crown Prince's throat carefully with the laryngeal mirror, and told the other doctors when he met them in consultation in an adjoining room that the condition "could be considered cancer without any other diagnosis". It was then unanimously agreed to recommend that the larynx should be opened by laryngofissure and the growth removed. Dr. Eugen Hahn, a well-known Berlin laryngologist with experience in similar cases, was to assist von Bergmann at the operation. The diagnosis, according to the official report published later, was based on the following points: (1) On the rapid recurrence of the growth; (2) on the hardness and unevenness of the growth; (3) on the fact that the inner surface of the growth remained raw; (4) on the impaired

mobility of the vocal cord; (5) on the certainty that tuberculosis "and other infectious diseases" (*i.e.* syphilis) could be excluded; (6) on a number of striking minor circumstances, such as the age of the patient and the site of the growth.

The fact that the tumour was at the posterior end of the vocal cord, in the region of the vocal process, was not commented on: for Virchow and Felix Semon together misled more than one generation of laryngologists by teaching that growths in the posterior half of the larynx were more likely to be cancerous—it was not until the patient and careful observations of Sir StClair Thomson were published in 1921 that it was established that cancer of a vocal cord appears most commonly in its anterior part, usually about the junction of its front and middle thirds.

On 18th May, after the second consultation, a cable was sent to London inviting Morell Mackenzie to come at once in consultation to Berlin. Von Bergmann told the Crown Princess (as she related in a letter to Queen Victoria, dated 19th May) on that same day that he would not decide on performing the operation before Morell Mackenzie had given his opinion, but that if Morell Mackenzie viewed the case exactly as he did, the operation would take place at once. It was actually fixed for 7 a.m. on the morning of Saturday, 21st May, at the New Palace at Potsdam. An operating table was brought in readiness from the Charité Hospital in Berlin, and two trained nurses had been engaged and were already at the Palace.

### III

On the night of Wednesday, 18th May, 1887, Morell Mackenzie sat at his desk in his consulting-room on the ground floor of No. 19, Harley Street. It was a room Victorianly magnificent. The patient of to-day having heard of bacteria and infection, would gape with more than an offended æsthetic sense at the pair of fine young foxes, stuffed and ingeniously used by the side of the Adam fireplace to support a waste-paper basket. Furniture punctilioseously handsome crowded a room fragrant with the perfume of hothouse roses set in vases and bowls in every corner, even among the shining instruments laid out on a table.

Mounted on an oak pedestal inside a square glass case on an

occasional table glistened an immense Georgian silver bowl, within which were engraved facsimile signatures of some thirty distinguished ornaments of the stage, from whom the physician of their voices, an ardent first-nighter, would never accept a fee. Signed photographs, in silver or crimson plush frames, stood wherever flowers left a space for them. Over the mantelpiece was a framed photographic group of the distinguished laryngologists from America and almost every European country at the International Congress of Medicine at Copenhagen in 1884, with Mackenzie as their President in the middle. Quaint old watches, blue Delft and Chinese vases, Chelsea and Crown Derby figures, silver daggers and crosses, Japanese fans, snuff-boxes and goblets, the silver model of a favourite dachshund, a tiny silver chariot drawn by diminutive oxen, and other curios and knick-knacks decorated cabinets and what-nots. Near the door was a massive Sèvres vase, bequeathed by a grateful patient, which had required three men to lift it from the pantechicon and place it in position.

The room, to the modern eye, was both grandiose and fussy; but the electric examination-lamp which stood beside the high-backed patient's chair, upholstered in brown leather, was the first to be used in London, and some at least of the shining instruments, made according to Mackenzie's own original ideas, were so well designed that they are in use by laryngologists to-day.

Morell Mackenzie, then a dark, bright-eyed, good-looking man of middle height, clean shaven and with the short side-whiskers characteristic of physicians of that period, did not try to conceal the smile of satisfaction that from time to time lit up his features as he wrote. He had pushed on one side the proof-sheets of a new edition of his textbook on diseases of the throat, on which he had been engaged earlier in the evening, and was feverishly writing one brief note after another and filling up a score of telegraph forms postponing or cancelling consultations with patients and apologizing for breaking dinner engagements, because he had been urgently called abroad to see a patient whom he could not refuse. Foreign singers who had come for the Covent Garden season, actresses and actors of the West End stage, politicians of both the House of Lords and the House of Commons, famous beauties of Society, merchant princes of the

City of London, and a host of the smaller fry of governesses, curates' wives and doctors' daughters, clergymen, schoolmasters, tradesmen and their families, were all being ruthlessly set aside. For in 1887, the apogee of the Victorian age, royalty were deemed more than ordinarily human, with something almost other-worldly about them, and this new and unexpected patient was not only of the blood royal but the Crown Prince of a great Empire, a Crown Prince married to the eldest daughter of Queen Victoria.

There was a knock—interrupting but insistent—at the door, and Bowden, the tactful and experienced butler, showed in a little man with dark moustache and side-whiskers and a kindly smile. It was Dr. James Reid, resident physician to the Queen. Reid was an able doctor who had taken good degrees at Aberdeen and had studied in Vienna, but owed his great success with Queen Victoria—in later years he became a baronet and married a Maid of Honour—mainly to his Scottish accent and his knowledge of German.

Reid was acquainted but not intimate with Mackenzie and, with a brief apology for breaking in upon him at such a late hour, informed him that he had come straight from Osborne at the special request of Queen Victoria, who had received a disquieting telegram from her daughter, the Crown Princess of Germany, begging her to send Dr. Morell Mackenzie at once for a consultation. No details were yet available, but it was known that the Crown Prince's throat had been giving him trouble lately—one or two paragraphs to that effect had been published in *The Times*—and it was concluded that this was the reason for the summons. The Queen had asked Dr. Reid to try to get Mackenzie to start as soon as possible. After Reid had delivered this message Mackenzie showed him a cable, which he had already received from the German doctors in attendance upon the Crown Prince, asking him to come to Berlin immediately for a consultation with them. There was no means of travelling that night, but Mackenzie assured Dr. Reid that he was putting off all his engagements and would leave for Berlin by the boat train in the morning. Thus began the peripety of triumph and disaster that has made Morell Mackenzie's name remembered and was to end in tragedy for prince and physician alike.

## IV

The summons of Morell Mackenzie has given rise to prolonged and acrimonious arguments and discussions. It was universally assumed in Germany at the time—and the assumption was encouraged by all the German newspapers and not discouraged by Bismarck himself—that the Crown Princess was responsible for bringing Mackenzie to Berlin. Even Haweis, Mackenzie's friend and biographer, inaccurately wrote (perhaps because Mackenzie preferred to believe it himself): "We all know it was at the special suggestion of the Empress Frederick that our great throat specialist was sent for to Berlin"; and Dr. Chevalier Jackson, who knew Mackenzie, was wider still of the mark when he wrote in 1939: "Queen Victoria knighted Mackenzie and sent him to take charge of her daughter's husband." K. F. Nowak wrote that the Crown Princess "was determined that an English doctor should be called in before the Crown Prince actually went under the knife", but it is absurd as well as untrue for Nowak to continue that when Queen Victoria's physician, Dr. Reid, heard the name of the chosen doctor his comment was: "My God! Here in England we have never heard of the man!" The Ex-Kaiser William II, on the contrary, speaks of Mackenzie in his reminiscences as "a distinguished specialist", even when he is casting aspersions on his good faith.

Morell Mackenzie's own account in his book, *Frederick the Noble*, gives but little evidence one way or the other. On the evening of Wednesday, 18th May, 1887, he says, as he was about to retire to rest, after a day of hard professional work, he received a message requesting him to proceed to Berlin to see His Imperial Highness, the Crown Prince of Germany. No hint was given as to the nature of the case, about which he had heard only vague rumours to which he had paid no particular attention. The German official gazette, the *Reichs-Anzeiger*, of 26th May, reported: "The medical authorities called in to consult with the Physician-in-Ordinary [to the Crown Prince] agreed that the English specialist, Dr. Morell Mackenzie, should be asked to give his opinion." The official report by the German doctors in the case, *Die Krankheit Kaiser Friedrich des Dritten*, states quite categorically that, at a consultation between Professors Gerhardt and von Bergmann and Dr. Wegner, Wegner

brought up the question of a laryngologist, several names were mentioned, and Wegner suggested Mackenzie, to whom von Bergmann and Gerhardt agreed. Among Morell Mackenzie's private papers was a note in the handwriting of the Emperor Frederick, conferring upon him the Star of the Hohenzollern Order, which began: "Charlottenburg, April 10, 1888. My dear Sir Morell, You were called to me by the unanimous wish of my German medical attendants. Not knowing you myself, I had confidence in you in consequence of their recommendation. But I soon learned to appreciate you from personal experience."

In the published letters of Queen Victoria appears the following extract from her journal: "19th May. Got a cypher telegram from Vicky [the Crown Princess] begging me to send Dr. Morell Mackenzie at once for consultation. We therefore concluded it was Fritz's throat, which has been causing him a good deal of trouble lately. Dr. Mackenzie is a celebrated specialist for the throat, and I sent Dr. Reid at once to him to try and get him to start as soon as possible. In the evening got another urgent telegram, asking for the doctor to come without delay, and a distracted letter from poor Vicky, saying that two eminent professors at Berlin had examined dear Fritz's throat in which there is a very small growth, which they had declared to be suspicious and possibly malignant. They consider that the only safe thing would be to remove it from the outside, a most alarming remedy; that, however, they would not do without having the first European opinion, which they considered Dr. Mackenzie to be. Greatly distressed, and cannot bear to think of poor darling Vicky's anguish and sorrow. We could hardly believe it; Fritz was otherwise well, but depressed at his loss of voice, and was to know nothing. Dr. Reid returned, having seen Dr. Mackenzie, who will start to-morrow morning. 'Such an anxiety,' said Lord Salisbury, to whom I confided my anxiety about dear Fritz. He was horrified, as Fritz's life is so precious."

Sir Felix Semon says in his autobiography that Wegner's (the Crown Prince's private physician) proposal on 16th May to ask for the opinion of another expert was favourably received, and when Wegner suggested Morell Mackenzie, Gerhardt and Bergmann consented. On 18th May, Semon goes on to say, Prince Bismarck appears to have intervened and arranged another consultation with three other German physicians as well,

after which the operation which had been decided upon was postponed for two days, till May 20th, in order to give time for Mackenzie, who had meanwhile been summoned by telegram, to arrive and express his opinion. Semon asks why an English physician should have been called in at the last moment to give a final opinion. Wegner, he answers, assured him personally some years later that the Crown Princess herself originated the idea with the question: "Who is the leading English specialist for diseases of the throat?" It was surely an amazing coincidence, Semon continues, that at that very moment his own German translation of Mackenzie's book on diseases of the throat lay open on Wegner's desk. The Princess, says Semon, despatched a telegram to the Queen and requested her to arrange for the attendance of Mackenzie forthwith. "Mackenzie therefore came to Berlin in the double capacity of trusted reporter to the Queen and adviser to the German physicians and," he asserts, "the Crown Princess was solely responsible for his coming." On this subject, however, Semon is a prejudiced witness and his observations must be taken with due reserve.

In a letter to *The Times* in 1928 Dr. Henry C. Semon, son of Sir Felix, who had edited his father's autobiography, said that the manuscript in his father's handwriting was somewhat more full than the necessarily abbreviated transcription in the autobiography, and also contained a paragraph to the effect that when Dr. Reid had delivered his message, Mackenzie showed him the cable which he had meanwhile received from the German physicians and which requested him to start immediately for Berlin to see the Crown Prince. "Of all this," said Sir Felix Semon, "Dr. Reid informed me in 1888. He recently confirmed it again (in 1913)." Prince Hohenlohe writes in his reliable memoirs: "July 6, 1887. The doctors in Berlin wished to operate. At the last moment Mackenzie came, at the wish of the Berlin physicians . . . Bismarck had been to the Emperor and opposed the operation." Bismarck himself says, in his *Reflections and Reminiscences*: "The doctors who were treating the Crown Prince were at the end of May, 1887, determined to make the Crown Prince unconscious and to carry out the removal of the larynx without having informed him of their intention." Bismarck states that he raised objections, required that they should not proceed without the consent of the Prince, and,

as they were dealing with the successor to the Throne, that the approval of the head of the family should also be required. The Emperor, after being informed by Bismarck, forbade them to carry out the operation without the consent of his son.

In his *Social and Diplomatic Memories*, published in 1922, Rennell Rodd described how the Crown Princess told the British Ambassador in Berlin, Sir Edward Malet, early in 1887, of her anxieties regarding the Crown Prince's throat and her ignorance of the best medical authorities; and of how Bismarck called soon afterwards, told of his intervention with the Emperor, and that the best specialist advice obtainable—after consideration, that of Morell Mackenzie—was to be consulted before a final decision regarding operation. As has already been related, Rennell Rodd wrote to *The Times* in November, 1926, repeating this story and contradicting the allegations of Emil Ludwig in his biography of the Ex-Kaiser William II, though Ludwig would not accept his contradiction. Further evidence, however, came to light after the death of the Ambassador's widow, when there came into the possession of Rennell Rodd a number of papers of the late Sir Edward Malet, among them the draft of a letter addressed by him to Count Herbert Bismarck, son of Prince Bismarck. This Rennell Rodd published in *The Times* in 1928. "Dear Count Bismarck," wrote Malet, "Will you kindly glance your eye at the passage which I have marked in this evening's *Norddeutsche Allgemeine Zeitung*? You will see that to the Queen of England also is to be attributed that the Crown Prince was committed to the care of the English specialist. The context indicates that the word 'also' means that the other person was the Crown Princess. Now as a matter of fact, of which I am sure that you are aware, the Crown Princess had nothing to do with calling in Sir Morell Mackenzie, still less the Queen. The report that the Crown Princess sent for him originally is doing her great injury, and is devoid of truth. Would it be possible, with reference to this paragraph, which gains credence through appearing in the semi-official paper, to state authoritatively in the same paper, or in the *Reichs-Anzeiger*, that Mackenzie was called in by the decision of the physicians attending the Crown Prince, and that the Crown Princess was not even consulted, and that certainly the Queen of England had nothing to do with it? I am sure

your chivalry will make you feel as I do about these statements." But from a note appended to this draft, continued Rennell Rodd (in *The Times*), it appeared that Count Herbert Bismarck, who spoke to the Ambassador on the following day, took the view that it was not certain that the Crown Princess might not have suggested Morell Mackenzie and that there was a danger of making matters worse by publishing a statement which the German doctors might dispute. He undertook, however, to speak to his father to see if anything could be done.

From these various versions the facts emerge, hidden as they have been by German prejudice (and also perhaps some English snobbishness) over many years. The intervention of Prince Bismarck, it is quite plain, was what finally determined the calling in of another and authoritative consultant, although it was already in the minds of the German doctors. Dr. Wegner, Physician-in-Ordinary to the Crown Prince, was an old friend of Semon's and possessed Semon's translation of Mackenzie's classic textbook—for long the only textbook in German on diseases of the throat. It was Wegner, therefore, who put forward Mackenzie's name as a consultant, but it could not have been unknown to the other doctors in attendance, and Professor Gerhardt was personally acquainted with him—there are several references to Gerhardt in the first volume of Mackenzie's textbook. It is evident that the Crown Princess was told, apparently on 18th May, by Wegner or von Bergmann, that Morell Mackenzie was being called in consultation and, not unnaturally, she reinforced by a telegram to her mother the summons for him to hasten to Berlin. But it is ridiculous to suggest that the Crown Princess or Queen Victoria was "responsible" for bringing Mackenzie to Germany. Bismarck, by his controlled newspapers, could have calmed the storm that afterwards raged round the Crown Princess over this summons; but Bismarck never believed in allowing sentiment to interfere with political expediency.

## v

Morell Mackenzie arrived in Berlin on the afternoon of Friday, 20th May, and drove at once to the New Palace at Potsdam, where rooms had been prepared for him. Almost at once he was conducted to the Crown Prince, who apologized

for the trouble his throat was causing to other people and especially for the long and tiring journey it had entailed on Mackenzie. His voice, the English laryngologist noted, though perfectly intelligible, was little more than a gruff whisper. The Crown Prince offered to submit himself for examination there and then, but Mackenzie suggested that it would be better that he should confer first with the doctors already in attendance. In another room Mackenzie met Professors Gerhardt, von Bergmann and Tobold, Dr. von Lauer, Dr. Wegner and Dr. Schrader. He says in his book that he felt some surprise that among this group of eminent medical men there was not at least one of the leading German laryngologists (such as Hahn, Fränkel, or Krause of Berlin, and there were others, equally well known, in other German medical centres), for although Professor Tobold had been one of the earliest laryngologists he was now almost in retirement and no longer operated, and Mackenzie concluded that the laryngeal affection of the Crown Prince must be only an accidental complication of some obscure disease.

After introductions, Dr. Wegner made a report of the case from the beginning up to the time that Professor Gerhardt was called in; then Gerhardt took up the story, without going into the details of the treatment he had adopted, merely stating that there was a small tumour on the left vocal cord, which he had tried to destroy with the galvano-cautery, after which the Crown Prince had been sent to Ems, but without deriving any benefit. Having listened to the history Morell Mackenzie took the Crown Prince into a darkened room and made a careful examination of his throat with a laryngoscopic mirror. He found a growth about the size of a split pea at the posterior part of the left vocal cord; it was of a pale pink colour, slightly rough on the surface, but not lobulated. On phonation a portion of the growth disappeared from view—a fact which showed that it was partly attached to the under-surface as well as the side of the vocal cord; in other words, the growth was partly “sub-glottic” in situation. There was no trace of ulceration on the growth, which, to the naked eye, bore the look of a simple wart or “papilloma”. The affected cord did not move with the same freedom as its fellow on the right side, and the mucous membrane in other parts of the larynx was slightly congested.

Except for the loss of voice, however, the throat gave the Crown Prince no trouble—no pain, no difficulty of breathing, no hindrance to swallowing. The patient came of healthy stock and had not impaired his fine constitution by excesses of any kind; but he had had to use his voice a good deal, both in the open air and indoors. This, then, was the case as it presented itself to Morell Mackenzie.

Having made his examination, Mackenzie withdrew to discuss the case with his colleagues. Professor Gerhardt and Tobold at once gave a positive opinion that the disease was cancerous,



Sketch of the laryngeal growth as first seen on 20th May, 1887.

From Morell Mackenzie's *The Fatal Illness of Frederick the Noble*, 1888.

and Professor von Bergmann, though expressing himself more guardedly—for he had not examined the larynx himself with a laryngoscope—substantially agreed with them. All three were unanimous that a surgical operation from the outside would be necessary for the removal of the growth; Mackenzie wrote, however, in *Frederick the Noble*, that the precise nature of the surgical procedure that would be required was never discussed in his presence—"in fact," he

says, "our consultations never reached the stage at which that question would have come up for consideration." When in the witness-box in his libel case in March, 1890, on the other hand, Mackenzie stated: "I learnt that it had been proposed to open the throat and take away a portion, if not the whole, of the larynx by an external operation."

When it came to Mackenzie's turn to speak at the consultation he pointed out that the opinion expressed by his colleagues had been come to on what seemed to him to be insufficient grounds, and that they had omitted the most essential and at the same time the most obvious means of arriving at a correct diagnosis, which was to remove a small piece of the growth by way of the throat and have it examined microscopically by an expert. According to the German report, Mackenzie stated that "he was opposed to an external operation until by such an examination the cancerous nature of the growth had been established". Professors Gerhardt and Tobold said that it would be difficult

if not impossible to do this on account of the awkward situation of the growth—Gerhardt avoided saying that he had already tried to remove the tumour, but unsuccessfully. Mackenzie answered that while admitting the case presented exceptional difficulties, he thought it could be done and at any rate should be attempted. “I then turned to Professor Gerhardt,” states Mackenzie, “and said to him, ‘Will you try?’ He replied, ‘I cannot operate with forceps’. I next asked Professor Tobold if he would make the attempt, but he also declined, saying, ‘I no longer operate’.” Mackenzie’s blunt comment in his book on these replies is that a throat specialist who cannot use the forceps is like a carpenter who cannot handle a saw. He then expressed his readiness to attempt the little operation himself, and it was agreed that any fragment removed should be sent for microscopical examination to Professor Rudolf Virchow of the Institute of Pathology at Berlin, who was the leading authority on the subject in the world and, indeed, the founder of the modern science of pathology. In his later official report Professor Gerhardt states: “Mackenzie was entrusted with the removal of portions of the tumour”—which is somewhat disingenuous. Mackenzie telegraphed to Dr. James Reid: “Growth on vocal cord. I operate to-morrow to get small portion for microscope.”

In making this recommendation for “biopsy”, as it is called nowadays, Mackenzie was on sure ground—in fact, he was well in advance of the general medical opinion of his day. As early as 1871, in his monograph *Growths in the Larynx*, he had advised this aid to more exact diagnosis, though he also sounded a note of caution against relying too greatly on microscopical examination for differential diagnosis. Dr. Chevalier Jackson, in 1939, in his standard work, *Cancer of the Larynx*, states that biopsy is “the logical diagnostic step” and the final arbiter in practically all cases. “The taking of a specimen for histological examination,” says Jackson, “should be done in every case of suspected malignant disease of the larynx, regardless of opinion based on mirror examination. Mirror diagnosis is always inconclusive.” But there are definite rules that must be observed in biopsy: There must be an ample amount of tissue, it must be taken with precision, and if inconclusive the biopsy must be repeated. To what extent Morell Mackenzie followed these

rules will be learned in due course. It is true, however, that the case of the Crown Prince Frederick helped to retard the general acceptance of biopsy as an aid to precision in diagnosis, and even within recent years there were some writers of text-books on laryngology who were still backward enough to deprecate biopsy in disease of the larynx, on the grounds that it hardly helped in diagnosis, might disseminate the growth, and it was often impossible to get a good specimen.

## VI

Unfortunately Mackenzie had come to Berlin unprovided with any instruments beyond those required for a simple mirror examination of the larynx, but after the consultation he visited the shop of the principal instrument-maker in Berlin, where he found a laryngeal forceps of a French pattern with which he determined to attempt to remove a specimen for examination next day. The instrument-maker had sold many of the laryngeal forceps designed by Mackenzie himself, but did not happen to have any in stock. Next morning all the doctors assembled again at the Palace and, having cocainized the larynx, Mackenzie with his unfamiliar forceps succeeded at the second attempt in removing a fragment of the growth. This was at once put into spirit by Dr. Wegner and given by him into the hands of Professor Virchow. For the information of Queen Victoria Mackenzie wrote the following letter that evening to Dr. James Reid: "I have little more to say than what I have already told you by telegraph. The Crown Prince has a growth on his left vocal cord; it has *not* a characteristic appearance; that is to say, it has not a malignant aspect, nor has it the common form of a benign growth. Its nature can only be determined by microscopic examination of a portion of the growth. I operated this morning, and was able to remove a small piece. This will be submitted to Professor Virchow. The piece I took away was rather small and superficial, and perhaps Virchow may not be able to determine the nature of the tumour from the portion removed. I may therefore have to operate again. I now wait for Virchow's opinion."

Two days later Dr. Wegner informed Mackenzie that Virchow had failed to find any evidence of cancer or malignancy in the

specimen, but, as it was rather small, he would like to have a further piece for examination. Professor Virchow's report on the first specimen, which was subsequently published in the *Berliner Klinische Wochenschrift*, was somewhat non-committal: "A very superficial piece of mucous membrane had been removed, to which at one spot only a somewhat irregular shred of deeper tissue adhered. In a few spaces, nests of epithelial cells had originated. Thus nothing was found that contradicted a simple irritative process." Virchow told Wegner verbally that the affection might be *pachydermia laryngis*—a thickened warty condition resulting from chronic inflammation, which in fact he had been the first to describe and name. He emphasized this opinion by lecturing on "*Pachydermia laryngis*" at the Berlin Medical Society on 27th June, letting it be understood that he was taking the case of the Crown Prince as his text.

Next day, when Mackenzie examined the Crown Prince's larynx, he found it rather congested, as if he had caught a slight cold—to which he had a tendency—the right vocal cord being specially affected. The day after, the larynx was still somewhat congested, but as his own instruments had now arrived from London, Mackenzie determined to make a second attempt to get an adequate specimen from the growth. In this, however, he was unsuccessful, and in view of the congestion he laid aside the forceps to postpone the biopsy for another day. Professor Gerhardt then asked to be allowed to examine the larynx, withdrew the mirror with an expression of alarm, and asked Mackenzie to look again. He did so, without seeing anything more than the congestion which he had previously noted, more marked on the right vocal cord. The doctors then retired to Mackenzie's room, where Gerhardt somewhat dramatically told Mackenzie that he must have injured the right vocal cord with his forceps. Mackenzie assured Gerhardt that that was quite impossible with the type of forceps he employed, the blades of which could cut away only a projection from the vocal cord and could not injure a smooth and healthy cord. Gerhardt's insistence that there had been an injury to the healthy vocal cord caused by Mackenzie's clumsiness had the unfortunate effect of beginning the ill-feeling between the English and German doctors concerned in the case, which led eventually to strained relations and serious quarrels of the most distressing

nature. Mackenzie was, above everything, confident, proud, and sensitive regarding his technical skill, and Gerhardt's accusation aroused all his rather easily outraged feelings of righteous indignation. To be fair to Gerhardt, he was not a laryngologist of anything like Mackenzie's experience and was probably in a state of considerable excitement while his Crown Prince's fate had still to be decided. Possibly he genuinely mistook the appearance of the congested right vocal cord and an excited imagination did the rest.

## VII

On 25th May another consultation was held, and it was decided that Mackenzie should endeavour to remove the growth from the larynx by way of the mouth, every portion of tissue then taken away being immediately sent to Professor Virchow. First of all Dr. Wegner was to apply an astringent and sedative powder (composed of morphia, bismuth, catechu, and sugar) daily to get rid of the congestion of the larynx. As this proved to be rather obstinate, Mackenzie returned to England to attend to his own pressing affairs, and did not return to Potsdam until 7th June. On the following morning he examined the Crown Prince's throat along with Dr. Wegner, found the congestion had entirely disappeared, and, after applying cocaine, succeeded in removing more than half the growth on the vocal cord. This was at once taken to Professor Virchow and a few days later at a grand consultation of all the doctors concerned in the case, his lengthy report was read. It concluded: "A more central portion of the growth has apparently been obtained. Although this portion shows marked disease, yet the healthy condition of the tissue on the cut surface allows a very favourable opinion to be formed as to prognosis. Whether such an opinion would be justified in respect to the whole disease cannot be ascertained with certainty from the two portions removed. However, there is nothing present in them which would be likely to arouse the suspicion of wider and graver disease."

In order to allay the anxiety of the general public regarding the Crown Prince, Mackenzie suggested to him that it might be desirable to publish Virchow's report, and orders were given that it should be communicated to the Berlin medical journals, while the *British Medical Journal* and *The Lancet* also immedi-

ately published translations. Virchow's report was highly encouraging, though negative rather than positive; but it may be suggested that he went rather beyond his strict province as a pathologist when he said that there was nothing in the portion of the growth that had been submitted to him to arouse suspicion of the nature of the remaining part. Butlin and Felix Semon (who took an unduly optimistic view about the possibility of cure by thyrotomy in the case, considering their own poor results at that period—1887) wrote in the *British Medical Journal* a week later, stressing the clinical features of the disease already recorded and sounding a note of warning against undue optimism founded on the pathological examination.

After the reading of Virchow's report a general discussion and consultation took place, the result being that, with the unanimous consent of all the doctors present, the Crown Prince was handed over to Morell Mackenzie for treatment. First, he was to attempt to extirpate or destroy the growth by means of instruments passed into the larynx through the mouth; but if, after a fair trial, this line of treatment was not found to answer, it would have to be considered whether an external operation should be performed, and if so what kind of operation should be done. Von Bergmann stated later in the official report that Mackenzie agreed, if the growth increased in size, to allow laryngo-fissure to be done; but Mackenzie insisted that the exact nature of any proposed future operation was never discussed, which, in view of Virchow's report, is more than probable. The Crown Princess wrote to Queen Victoria on 2nd June that she had spoken to Professor Gerhardt on the previous evening and that he said: "If Dr. M. Mackenzie cannot assist and cure it there is no chance of recovery save in the operation known as 'laryngotomy'. It would have to be performed under far less favourable conditions than would have been the case fourteen days ago. Therefore my only hope is that Dr. Mackenzie may be right in his opinion and that his treatment may be successful, for we have nothing else to suggest."

The Crown Princess went on to say in this letter that her husband's one hope and wish was to be at Westminster Abbey on 21st June, to represent the German Emperor at Queen Victoria's Jubilee. It had been suggested that it might be better for Prince William (afterwards the Kaiser William II) to go to

England and represent his father and grandfather, but it was felt that it would depress the Crown Prince if he did, and in the end both went, though the Crown Prince took little part in the festivities. Morell Mackenzie was also anxious to have the Crown Prince more completely in his personal charge, now that he had been entrusted with his treatment, though the official German report states that it was agreed "that treatment in England be under the control of a German doctor with experience of laryngoscopy". The Crown Prince was accompanied abroad by his Physician-in-Ordinary, Dr. Wegner, and also by Professor Gerhardt's assistant, Dr. Landgraf, as Gerhardt's personal quarrel with Mackenzie ruled him out, although (according to her letters) the Crown Princess had thought that Gerhardt was to accompany the party, at least for a short time. Mackenzie believed that Landgraf's function was that he might be at hand in case tracheotomy became suddenly necessary; but apparently Professors Gerhardt and von Bergmann looked upon him as the German "controller", to report direct to them.. The party arrived in London on 14th June, and the Crown Prince went to live quietly at the Queen's Hotel in Upper Norwood, to avoid talking and crowds, with Dr. Norris Wolfenden, Physician to the Throat Hospital and a former assistant of Mackenzie's, as his resident medical attendant.

## VIII

The sun shone brightly on the morning of Tuesday, 21st June, 1887, when the Jubilee of the accession of Queen Victoria fell to be celebrated. Along the crowded streets, spanned by occasional triumphal arches, Venetian masts, surmounted by crowns and with armorial shields midway up their length, rose gracefully towards the sky, with festoons of evergreens slung from pole to pole. The houses, balconies, and stands were decorated with greenery, flags and coloured draperies, with here and there loyal mottoes and trophies of arms. At eleven o'clock the bands stationed along the route struck up a rousing march, the chief Commissioner of the Metropolitan Police, Sir Charles Warren, wearing all his medals, galloped to and fro and, preceded by a troop of Life Guards, the first part of the Jubilee procession left Hyde Park Corner for the Abbey. To

the public disappointment these plain two-horsed carriages, conveying important foreign guests, were closed, except for the open carriage of the Maharanee of Cooch Behar, her golden silk dress sparkling with jewels. After an interval another troop of Life Guards heralded the approach from Buckingham Palace of a further and more important section of the cavalcade, including the King of Saxony, the King and Queen of the Belgians, the King of the Hellenes, the King of Denmark, and the Archduke Rudolf of Austria. Their carriages still were closed, but the scarlet coats of equerries, the gorgeous liveries of coachmen and footmen, the elaborate trappings of the horses and the gilding and ornamental upholstery of the carriages, made a magnificent spectacle.

The bands began to play the National Anthem and at last the grand finale of the Golden Jubilee procession began to be unfolded. A troop of the Prince of Wales's Hussars cleared the way, followed by Horse Guards and Life Guards with drawn swords, burnished helmets and flashing cuirasses, then aides-de-camps and equerries on horseback, and then six open carriages of German princesses and other near relations of the Queen, with their ladies-in-waiting, all in dazzling raiment. Next came the Headquarters Staff of the Commander-in-Chief, resplendent in their medals and orders, with Lord Wolseley, the Adjutant-General, in the full uniform of a Field-Marshal. Six more open carriages followed, each drawn by four magnificent bays, containing members of the Royal Family. Then, preceded by the Master of the Horse, came a galaxy of seventeen princes on horseback, grandsons and grandsons-in-law, sons and sons-in-law of her Majesty, riding in threes. In the middle, on a white charger, the Crown Prince of Germany was conspicuous, wearing the striking white uniform of the Pomeranian Cuirassiers, his eagle-crested helmet and silver breast-plate gleaming in the sunshine, the star of the Order of the Garter on his breast, and his Marshal's baton in his hand. But—*Post equitem sedet atra Cura.* His tall, commanding, bearded figure and soldierly appearance called forth the admiration mingled with sympathy of the crowds, for he looked thin, and many remembered that he had not yet fully recovered from his recent illness and was still under medical treatment. He was much gratified by his reception, which could not have been more cordial in his own

country. That evening he noted in his little pocket-book: "The ambulance arrangements on the day of the Jubilee. The drinking-troughs for horses and dogs, and the cabmen's shelters in the streets of London."

In the rear rank of the group of princes rode the Prince of Wales, a short, stout figure in the red uniform of a Field-Marshal, doffing his plumed hat and bowing from side to side in response to the plaudits of the crowd, as his horse caracoled in impatience at the slow procession, with his brothers, the Duke of Edinburgh as an admiral and the Duke of Connaught as a general, on his right and left. Escorted by twelve turbaned Indian officers with drawn swords, mounted on Arab horses, last of all in the glittering procession, in an open barouche drawn by six cream-coloured horses, seated with the Princess of Wales and the Crown Princess of Germany, and with the Duke of Cambridge, Commander-in-Chief, riding beside her, came the already legendary Queen Victoria, the mother of her people, past disagreements and criticisms now for ever forgotten. She was dressed in her accustomed mourning costume of black lace and black satin, relieved on this day of rejoicing by the broad blue riband of the Garter, the stars of her Orders, and a white bonnet set with large diamonds and surmounted by a white feather.

Westminster Abbey was crowded with a brilliant congregation: peers and peeresses, members of Parliament, naval and military officers, civil servants, the Speaker of the House of Commons in his full-bottomed wig and official robes beside the frock-coated members of the Cabinet and the leaders of the Opposition, and, in front of a large group of provincial mayors, the bailies of Edinburgh, looking like peers in their scarlet and white robes, alongside the plain-clad citizens of the Metropolitan Board of Works. Representatives of every science and every art were seated there, University chancellors, heads of Colleges, and headmasters of the great public schools, the President of the Royal Academy with his bearded Council, among a score of actors and actresses the lovely Ellen Terry and the imperious Mrs. Kendal, and close behind them Dr. Morell Mackenzie and his handsome wife. Gentlemen-at-arms stood round the Royal enclosure for the foreign guests, among whom sat the Queen of Hawaii, dressed in a black lace dress with the red ribbon of

an Order, beside princes from Persia, Siam, and Japan. Around the five-hundred-year-old coronation chair were forty gilt chairs for the princes and princesses, separated from the congregation by a gilt rail.

As the sun rose higher in the heavens rays of light streamed through the old coloured glass, throwing blotches of vivid colour on the faces of the assembled people. Half an hour late, to the strains of a fanfare of trumpets and the organ pealing a march of Handel's, came a procession led by minor canons and canons residentiary, the Bishop of London, the Dean of Westminster, and the Archbishops of Canterbury and York in their superb copes, then Heralds, Lords-in-Waiting, the Prince of Wales with the Crown Prince and the other fifteen Princes, Garter King-at-Arms, the Lord Steward and the Lord Chamberlain, preceding the Queen, who was followed by the Princesses. The Queen sat facing the altar upon her scarlet and ermine coronation robes, which were laid on the ancient coronation chair, over the stone of Scone, while a *Te Deum* composed by the late Prince Consort was sung, the lesson was read, and Archbishop Benson offered up the special prayer for the day. At the end of the service the Prince of Wales stepped forward to kiss the Queen's hand, and she embraced him warmly. He was followed by the Crown Prince, and, as he stepped back, the Queen drew him to her and kissed him on the cheek; the other Princes and Princesses then similarly paid homage in turn. When the Queen stepped down from the coronation chair, it chanced that the Crown Prince stood near her; seized by a strong impulse she embraced him again, lingering on his arm, as if in that moment of emotion she had a premonition of what was to come.

## IX

The Crown Prince's throat was still somewhat congested and he called almost daily at Morell Mackenzie's house in Harley Street for treatment. Felix Semon saw him one day alighting at the doorstep, looking anxious and full of care. "To be so near," he says in his autobiography, "and animated by such devoted wishes for his recovery, and yet to be debarred from even a word of warning"—against the wiles of Mackenzie—"it was almost more than I could bear!" At last the congestion subsided and

on the 28th June, in the presence of Dr. Wegner and Dr. Norris Wolfenden, Mackenzie succeeded in bringing away with his laryngeal forceps what appeared to be all that was left of the growth. Dr. Wegner put the specimen in spirit in a sealed flask and it was sent at once by special messenger to Professor Virchow at Berlin. Virchow's detailed report was subsequently printed in full in the *British Medical Journal*—its conclusion ran as follows: "No deep layers of tissue, as after the first, and still more the second operation, had been removed. The section had been made very near the surface, so that only mucous membrane was removed. Thus only a little tissue, and that difficult to handle, was afforded for the purpose of an opinion on the structure of the underlying parts. No alveolar structure, or deposition, or penetration of epithelial masses could anywhere be perceived in this tissue. It consisted of young connective tissue, which had increased not towards the deeper part, but towards the surface, and contained elements some of which were proliferating. Nowhere did this proliferation reach the character of an independent centre of formation. Thus this excised portion, in a still higher degree than was the case with the portions obtained by the previous operations, has shown itself to be a hard, compressed warty growth, that has started, from a moderately irritated and thickened surface, and the examination of its base has not afforded the least support for the idea of a new formation penetrating inwards."

The chief point of this report lies in the final sentence. The outstanding feature of a cancer is invasion, and evidence that surface ("epithelial") cells have had the power to cross the line of demarcation between the surface layer and the underlying layers of a structure of the body constitutes positive evidence of malignancy or cancerous growth. Virchow found no such evidence—but again it must be noted that the opinion he formulated was negative, not positive.

The Crown Prince and Princess now proceeded first to Norris Castle in the Isle of Wight and then—accompanied by young Mr. Mark Hovell, Surgeon to the Throat Hospital, for domestic circumstances prevented Dr. Wolfenden continuing as resident physician—went on to Braemar, in Scotland; but no accommodation was available there for Dr. Wegner and Dr. Landgraf, who stayed at Edinburgh, where they could be easily reached if



THE CROWN PRINCE AT THE JUBILEE OF QUEEN VICTORIA.



THE CROWN PRINCESS IN 1887.

*Printed by the Author*

necessary. On 11th July a slight swelling of the mucous membrane of the posterior part of the larynx had been observed by Wolfenden, and Mackenzie feared that this might indicate inflammation of the superficial covering of the cartilage ("perichondrium") of the larynx if not of the cartilage itself, and warned the Crown Princess of the possibility of serious perichondritis at some future date. On 2nd and 7th August Mackenzie carefully applied a specially designed galvano-cautery to remove a small recurrence of the growth on the left vocal cord. It healed completely and this growth never returned. At Balmoral, when he went over from the Fife Arms at Braemar, Queen Victoria was delighted to hear the Crown Prince's "natural voice again". Mackenzie nevertheless impressed upon the Crown Princess that although at the moment everything looked most promising, the possibility of an unfavourable development later could not be ignored.

Influential persons at Berlin were now urging that the Crown Prince should come home, for the health of his father, the Emperor—who was over ninety—was precarious. The Crown Princess on the contrary strongly supported Morell Mackenzie's advice that the return of the Crown Prince to the bustle and worry of Berlin should be avoided as long as possible, and when he left England with the Crown Princess and Mark Hovell on 3rd September it was for Toblach in the Tyrol. A few days after he left, at his express desire Queen Victoria sent for Morell Mackenzie to come to Balmoral. "I shall have much pleasure," she wrote to the Crown Prince, "in conferring a Knighthood on the physician who has rendered you and us such great service, for Dr. Morell Mackenzie has indeed treated you with the greatest skill." In her journal the Queen wrote: "Balmoral, 7th September, 1887. Directly after luncheon knighted Dr. Morell Mackenzie in the drawing-room. He said dear Fritz was much better, but must be very careful not to talk much and not to catch cold. I asked what had led to this illness, and he could not say much, but he thought it had been long coming on, and been entirely neglected. The little growth, which he removed, had come from the inflammation in the throat."

## CHAPTER FIVE

### *SAN REMO*

#### I

AFTER three pleasant weeks among the pine-woods of Toblach the Crown Prince caught a severe cold, and it was now decided by Morell Mackenzie that San Remo was the most suitable place for the patient to spend the winter. But first of all a move was made to Venice, a city the Crown Prince knew well and of which he was very fond, where the effects of the cold disappeared, and then to the Villa Clara at Baveno, which had a large park, beautifully situated on the shore of Lake Maggiore. At Baveno Mackenzie made a careful examination of the larynx, finding nothing but slight general congestion and the remains of a subglottic swelling which Mark Hovell had noticed at Toblach, apparently due to inflammation from the cold. Mackenzie said good-bye to his patient at Baveno, not expecting to see him again for many months, and returned to London. On 18th October, the Crown Prince's birthday, the official gazette, the *Reichs-Anzeiger*, published the following statement: "Sir Morell Mackenzie again visited the Crown Prince at Baveno and again verified the continuance of an improvement in the throat ailment of his Imperial Highness. But he must spare his voice as much as possible and spend the winter in a warm climate to avoid catching cold." Mackenzie wrote from London to Professor Oertel of Munich—who a few years previously had attended the family of Queen Victoria's younger daughter, Princess Alice, Grand Duchess of Hesse-Darmstadt, when nearly all the family were attacked by diphtheria and the Princess and one of her children died—telling him, in reply to a letter about the Crown Prince, that there had never been anything at all characteristic of cancer so far as naked eye appearance went, so that his treatment had throughout been based on the observations of Professor Virchow, whose investigations, however, only furnished negative evidence. "I shall not feel safe from anxiety," wrote Mackenzie, "until six months have elapsed since the application of the electro-cautery. I need scarcely assure those

who know me that I have never been in the least unwilling to meet my German confrères, and should any unfavourable symptoms unfortunately develop I should be the first to ask for the co-operation of one of your countrymen."

This last promise was soon to be fulfilled. On 3rd November the Crown Prince and Princess went to San Remo, where a house, "very expensive, but new and clean and pretty comfortable" (as the Crown Princess described it), the Villa Zirio, belonging to Count Cecil d'Aix, had been taken. The villa consisted of two storeys and a basement, the Prince's private apartments being two large rooms facing east and west, in order always to catch the sun. It stood on the slope of the mountain above the great Riviera road, imperfectly concealed by a wall and by olive-trees and palms; in comparison with the park at Baveno the garden was small, but the villa had the advantage of belonging to an Italian, for the German newspapers had commented sourly on the fact that the villa at Baveno belonged to an Englishman, Mr. Henfrey. Hardly had the Crown Prince been twenty-four hours at San Remo when Mark Hovell observed a serious change in his patient's throat, the sub-glottic swelling having increased alarmingly, and he sent an urgent telegram to Morell Mackenzie, who arrived on the evening of 5th November. Next morning, when he examined the larynx, he found the left arytenoid (behind and above the vocal cord) swollen and bright pink, and a sub-glottic tumour half an inch below the left vocal cord, with a smaller one below the right cord. Its appearance was altogether unlike the other swellings which had shown themselves in the larynx, and in Mackenzie's opinion "had in fact a distinctly malignant look". He told the Crown Prince that a very unfavourable change had taken place in his throat. He asked: "Is it cancer?" To which Mackenzie replied: "I am sorry to say, sir, it looks very much like it, but it is impossible to be certain." After a moment of silence the Crown Prince took Mackenzie's hand and said, with a sad smile: "I have lately been fearing something of this sort. I thank you, Sir Morell, for being so frank with me." At dinner that evening the patient was quite cheerful, and chatted freely, and a day or two later, in reply to an inquiry about his general health, he answered that he had never felt better in his life, adding: "Under the circumstances, I really must apologize for feeling

so well." Mackenzie sent a telegram to Dr. Reid for Queen Victoria: "Fresh development lower down, exact nature uncertain, but looks unfavourable; have advised Professor Schrötter of Vienna and Dr. Krause of Berlin should be consulted; no immediate danger." A bulletin in the same terms was published on 7th November in the Berlin official gazette.

Two days later there was a column in *The Times* from its Berlin correspondent about the Crown Prince, the uneasy feelings of the public, and the unsatisfactory nature of the bulletin. Professor Virchow had told the correspondent that "the difference between an organic growth and an inflammatory swelling



Sketch of the larynx made on 6th November, 1887, showing a large new growth below the left vocal cord and a smaller one below the right vocal cord.

From Morell Mackenzie's *The Fatal Illness of Frederick the Noble*, 1888.

would only, of course, hold, if the present development of the Crown Prince's ailment proves to have been rapid, instead of gradual". Next day *The Times* had another column from Berlin, giving a long abstract of a lecture given at Vienna University by Professor Störk, one of the leading teachers of laryngology there. He said that the responsibility for the treatment of the Crown Prince must entirely rest on Sir Morell Mackenzie and not on the pathological anatomist Virchow. He

explained the formation of warts or "papillomas" in the larynx and suggested (quite incorrectly) that "they might gradually become hard and dangerous by growing inwards . . . All that had been done in the case of the Crown Prince is not only absolutely useless but even detrimental . . . It is regrettable," insisted Störk, "that the advice of authorities like Gerhardt, Bergmann, and Tobold, who from the beginning recognized the Crown Prince's illness as cancer, should not have been accepted in Germany, and that the case should have been entrusted to a gentleman who sends his Imperial Highness travelling. Cancer grows rapidly in every climate, whether in London, Berlin, Baveno, or San Remo."

Next day, however, Professor Navratil, professor of laryngology at Budapest, gave a lecture replying to Störk and upholding Mackenzie's treatment, while two days later Professor

Schnitzler of Vienna, at the request of his students, lectured on diseases of the larynx and said that Sir Morell Mackenzie was perfectly free from reproach and could not have acted otherwise in the face of Professor Virchow's statement. "Extirpation of the larynx," said Schnitzler, "injured the patient for life, and experience showed that the patient would probably have lived longer without the operation." Störk's outburst was partly, at least, reaction to the calling into consultation of his colleague, Professor von Schrötter, for it was notorious that the various Viennese teachers of the same medical subjects nursed a poisonous hatred for each other.

The publication of Störk's remarks, at such a time, in *The Times*, shows that the so-called responsible and sedate newspapers of the 'eighties would have had little to learn in the way of personalities and the disregard for the feelings of individuals from the most "yellow" journals of to-day. The excuse was that royalties were news and their most intimate affairs were of public interest. The newspapers not only of London, Berlin, and Vienna, but of all over the world, sent correspondents to San Remo and from then onwards published columns almost every day about the unfortunate Crown Prince and his illness. The staff of the telegraph office had to be doubled. Thirty correspondents lay in wait for Mackenzie, who had rooms at the Hôtel Méditerranée, badgered everyone connected with the Crown Prince's household, and sat with field-glasses or telescopes trained from points of vantage upon the Villa Zirio. The German Conservative pro-Bismarck newspapers took a pessimistic view, while the Liberal pro-Crown Prince newspapers were correspondingly optimistic. On the same day *The Times* published a dispatch from the correspondent at San Remo of the *Kölnische Zeitung* and below it another dispatch from the correspondent at San Remo of the *Berliner Tageblatt*. The first ran as follows: "The doctors have observed the existence of thin granular formations, unimportant in themselves and implying no new danger, but unfortunately dispelling almost all doubts as to the Prince's ailment being cancer." The second on the contrary stated: "One thing at least is now admitted by the doctors. They confess they do not yet see clearly, but they incline more and more to the opinion that the Prince's ailment may after all not be cancer."

## II

On 9th November, Professor von Schrötter arrived from Vienna and Dr. Krause from Berlin, the history of the case was discussed with Mackenzie and Hovell, and Mackenzie described the new sub-glottic tumour he had first seen on 6th November, ending with the words: "This growth looks like cancer." After examination of the patient, the doctors returned to the Hôtel Méditerranée, where Schrötter affirmed that the disease was cancer and recommended excision of the whole larynx, Krause thought it highly probable that the disease was a "malignant neoplasm", but thought it wise to give potassium iodide to make sure that it was not syphilis (this was an accepted method of differentiating syphilis from other diseases in the days before the discovery of the Wassermann test), while Mackenzie thought it would be best to wait until the swelling of the larynx had subsided and then remove a small piece of the new growth for microscopic examination. That evening it was learned that Prince William had arrived at San Remo, having brought with him Dr. Moritz Schmidt, of Frankfurt, a well-known laryngologist, with instructions to draw up a report on the case for the Emperor. Next day, therefore, a further consultation took place at the Villa Zirio, in which Dr. Moritz Schmidt took part. The other doctors adhered to their former opinions, and Moritz Schmidt agreed with Krause and urged that large doses of potassium iodide should be given, on the ground that the disease might be the result of syphilitic infection dating from many years back. Von Schrötter scouted this idea as an old wife's tale (*altes Weibergeschwätz*) but agreed, with Krause and Mackenzie, that there could be no harm in trying the effect of this drug. Before von Schrötter left San Remo he told Mackenzie that he only agreed to potassium iodide being given because no external operation was contemplated. After Dr. Moritz Schmidt got back to Frankfurt he gave a lecture at the University, which was gleefully but unkindly reported in the Parisian newspapers, stating openly that in his opinion the disease from which the Crown Prince was suffering was "of contagious origin", *i.e.*, syphilis. Morell Mackenzie wrote—in surprisingly mild terms, unlike his accustomed vehemence—regarding this in *Frederick the Noble*: "The

Crown Prince expressed the greatest annoyance at Dr. Schmidt's indiscretion, and begged me to contradict the statement, for which I may here say there was not the shadow of a foundation."

When the doctors had examined the Crown Prince, Prince William summoned them to him to give their verdict. The first to speak was Morell Mackenzie, who told the Prince that in his opinion his father was suffering from cancer of the larynx and would not live more than eighteen months. The other doctors agreed with his definite opinion and said that the result of even complete removal of the larynx would be most doubtful, so that the decision regarding operation must be given by the Crown Prince. Dr. Krause alone gave a rather more guarded opinion. Prince William then asked the question, how long had the disease been present to have reached this stage of development, and received the answer, at least six months. "I thought," he says, in *My Early Life*, "that Mackenzie would die of shame, but his face, which I was watching narrowly, showed no trace of emotion."

It was determined that a statement, setting forth the advantages and disadvantages of excision of the larynx, both partial and complete, should be drawn up by Professor von Schrötter, who was presumably unbiased, and submitted to the Crown Prince, to whom the decision as to the course to be adopted should be left. The following bulletin was published in the official gazette at Berlin, signed by Morell Mackenzie, von Schrötter, Schrader, Krause, Moritz Schmidt, and Mark Hovell: "San Remo, November 10, afternoon. The assembled doctors hereby testify that within the last few days there has arisen a swelling in the larynx of his Imperial Highness the Crown Prince, which it is to be hoped will again subside under the influence of proper means and of the excellent bearing of the illustrious patient." The bulletin certainly did not err on the side of clarity and did little to allay the anxieties of the German people, whose one desire was to know whether the growth below the swelling was of a cancerous nature or not. Morell Mackenzie cabled to Dr. Reid: "Patient better. All doctors agree external operation not necessary at present."

The doctors decided that the Crown Prince should formally be made acquainted with their views at a personal interview and that Professor von Schrötter should be their spokesman.

Von Schrötter did not impress the Crown Princess favourably. She found him (as she wrote to her mother) rough, uncouth, and arrogant. "Perhaps," she continued, "he did not show to advantage before me. I cannot enough repeat how wise and kind, how delicate and considerate and judicious Sir Morell Mackenzie is—such a real comfort and support—and always calm and collected—also Dr. Hovell; I should not have known what to do without them." In Mackenzie's opinion Professor von Schrötter discharged his unpleasant duty "with great tact and judgment" in the presence of the Crown Princess and all the doctors. The Crown Prince remained standing while von Schrötter was speaking and was the calmest person in the room. Though von Schrötter did not actually use the word "cancer" he made it perfectly clear what he and his colleagues believed the disease to be and explained the alternatives in the way of treatment. The doctors then withdrew and, after a period of reflection, the Crown Prince sent them a written communication that he declined to have his larynx excised but would submit to tracheotomy should it become necessary. It was agreed that this operation should, when the time came, be performed by Professor von Bergmann, unless difficulty in breathing came on suddenly when it should be done by someone on the spot. That evening the Crown Prince wrote in his diary: "And so I suppose I must set my house in order."

### III

As regards the question of treatment, when a major and possibly dangerous operation is contemplated in a case of serious disease, it is the duty of the doctor or doctors to lay the pros and cons fairly before the patient, but the decision must lie in the hands of the patient. It depends largely on the patient's mentality and philosophy of life, and until recent years many patients—and especially a man in an important public position—would have considered that there was little to choose in a case of advanced cancer of the larynx between allowing the disease to take its course and, as Jonathan Wright wrote in 1914, "dragging out a few miserable years of life without a larynx". Felix Semon, in the 'eighties, stressed the extremely high operative mortality of laryngectomy and especially

"the deplorable, even suicidal, mental state" of the patient should he survive. Morell Mackenzie, in his textbook in 1880, looked upon the lasting cure of even three patients out of nineteen by laryngectomy as "one of the greatest triumphs of modern surgery". The Crown Prince had to take other matters into consideration: The advanced age and poor health of his father; the probability of his own early accession to the Throne and the hope that he might have time to begin to establish a Liberal Government and reward his Liberal supporters; the difference between dying a Prince and leaving his wife a Princess and, by taking no chances, dying an Emperor and leaving his wife an Empress. In public he put on a brave face, but in private he grieved to his wife, (as she wrote to Queen Victoria): "To think that I should have such a horrid, disgusting illness! I had so hoped to be of use to my country. Why is Heaven so cruel to me? What have I done to be thus stricken down and condemned? What will become of you? I have nothing to leave you! Who will fight Moretta's battles" [his eldest daughter, Princess Charlotte of Saxe-Meiningen]?

A short bulletin was prepared exclusively for the information of the Emperor and the doctors were given to understand, by Dr. Schrader and Count Radolinsky (the Crown Prince's Court Marshal) that the German public was to be gradually prepared by a series of cautiously worded bulletins which should make the real state of the case generally known without shocking the feelings of the Crown Prince. The doctors received the most solemn injunctions not to divulge their opinions on the nature of the case and the results of their deliberations. Unfortunately, by some mischance or by intention, their confidential bulletin to the Emperor was published in the *Reichs-Anzeiger* at Berlin on 13th November, when the general public were stupefied to read the blunt announcement, signed by Mackenzie, von Schrötter, and the other doctors: "On examining His Imperial and Royal Highness the Crown Prince's larynx, the assembled physicians have been able to establish the fact that the disease is due to the existence of a malignant new growth."

The publication of this bulletin apparently followed an interview by the Emperor with Moritz Schmidt on his return, at which Professors von Bergmann, Gerhardt and Tobold, with Dr. Wegner, were also present. The Emperor asked two questions:

Whether, in spite of the Prince's refusal to permit the radical operation of extirpation of the larynx, he should be advised to undergo it; and why, when in May and June the intended operation had been abandoned, the question had been raised again at so late a date? After the interview with the Emperor, Moritz Schmidt went with the other doctors to the Household Ministry, where they had a long conference with its President, Count Stolberg-Wernigerode. At this conference it was placed on record that the doctors called to San Remo were unanimous in pronouncing the Crown Prince's ailment to be cancer; they recommended the operation of extirpation of the whole larynx, but the Crown Prince decided against the operation. Thereupon the doctors restricted themselves to recommending tracheotomy, an operation which did not aim at cure but only at averting immediate danger. At the Household Ministry the doctors present said they had no hesitation in approving the proposals made at San Remo. The answer to the Emperor's second question was published later in the official report of von Bergmann and the others: "That a definite promise 'to undergo the operation if the tumour grew' having been obtained in May of the current year, the responsibility for its non-performance until too late had been incurred by that physician who had overlooked, nay, even denied, the increase of the growth."

Queen Victoria was at Balmoral, and recorded in her journal correspondence between Morell Mackenzie and Dr. Reid. "13th November. Dr. Reid brought me a letter from Sir M. Mackenzie which alas! is not very satisfactory, though not devoid of hope! The doctors seem to agree that the growth is of a malignant character. As regards the treatment, there is a difference of opinion. Sir M. Mackenzie advocates simply palliatives to prolong life, but the German surgeons, on the other hand, are in favour of an operation, which *they* say is not dangerous, and which offers a prospect, or at least a chance, of recovery, with an impaired voice. It is dreadful, but there must still be some hope." On 14th November Dr. Reid showed the Queen his reply, marked with his usual common sense: "He is so afraid," observed the Queen, "that both sides of the question may not have been duly weighed, for it must be borne in mind that palliatives cannot eradicate the disease, whereas the operation of opening the throat and removing all the growths might do

so. The German doctors, as well as some in England, do not consider this operation as very dangerous." On 18th November the Queen noted: "A letter from Sir M. Mackenzie to Dr. Reid saying that an operation would have been too dangerous, as the great object was to prolong dear Fritz's life, whereas the immediate risk of an operation would have been great. This the German doctors all agree in. Sir M. Mackenzie continues to be of the opinion that there was nothing malignant in June. I cannot help hoping against hope that the disease may not progress rapidly."

At a meeting of the Berlin Medical Society on 16th November Professor Virchow declared that Sir Morell Mackenzie had endeavoured to render him responsible for the past treatment and the present condition of the Crown Prince. This allegation he refuted. The presence of a growth below the vocal cord had now been established, while the portion which he examined was excised from the surface of the left cord where, at all events, there was no cancer. He did not go beyond his task of examining and expressing his opinion upon the particles submitted to him. In reply to this statement, Mackenzie in an interview said that he had never endeavoured to force any responsibility on Professor Virchow, except for his opinion on the portions of growth which he (Mackenzie) had removed. It was very rare, however, for portions of growth to be repeatedly removed (three times in the present case) without cancerous elements being detected; and there was no doubt that this negative evidence afforded a strong hope that the cancer did not exist in the deep-seated tissues, and that cancer degeneration might not occur.

In the meantime the swelling in the Crown Prince's throat subsided, Morell Mackenzie left San Remo for London, for the next few weeks encouraging bulletins continued to be published, and the Crown Prince, whose voice was clearer and stronger, went for drives and walks in the sunshine and once even for a ride on horseback. Mark Hovell sent the following telegram to Dr. Reid on 29th November: "Crown Princess anxious to hear whether the Queen has seen Sir Morell. Crown Prince doing well: gone for drive to Bordighera." On 1st December he telegraphed: "The condition of Crown Prince continues satisfactory. There has been during the last ten days considerable diminution of swelling of left side of larynx, which

appeared with beginning of inflammatory symptoms at end of last month." And on 10th December: "General health of Crown Prince remains good: he goes for long walk daily." On 10th December *The Times* printed a letter from the Crown Prince to his former tutor, Dr. Hinzpeter, now living in retirement at Bielefeld: "Heaven will determine what course is to be taken by my ailment, the care of which has been entrusted, after the Crown Princess, to the best specialists, who continue to enjoy my complete confidence, in spite of all the attacks to which they have been exposed. I am by no means faint of heart, and hope to be still able to devote my energies to the Fatherland." The Crown Princess, writing to a friend, was less optimistic: "Who can tell," she wrote, "how much time will still be granted him?"

## IV

Morell Mackenzie had left San Remo on 14th November, but exactly a month later Drs. Hovell, Krause, and Schrader became alarmed at the appearance of a new swelling in the larynx, and at the Crown Prince's desire Mackenzie was recalled by an urgent telegram: "Sudden increase of growth." When, however, he examined the larynx on 15th December he said that he could find no dangerous signs or symptoms, and on 17th December the following bulletin was issued, signed by Mackenzie, Schrader, Krause, and Mark Hovell: "On the left half of the larynx of the Crown Prince there is now visible a small growth situated a little higher up than the swelling which appeared at the end of October and which, partially cicatrized as it is, has decreased in size. The Crown Prince's general condition appears to be good." Morell Mackenzie telegraphing to Dr. Reid, was rather more precise: "Small new growth on left ventricular band, does not look malignant, general appearance of larynx much more favourable than it was beginning of November." The Crown Princess telegraphed to her mother: "No alarming symptoms present, Fritz feels as well as usual, much annoyed at exaggerated reports." *The Times*, not without reason, commented on the "singular looseness in the use of medical terms" employed in the bulletins, for the words swelling, growth, tumour, and oedema were used apparently indiscriminately; but in any case the Crown Prince continued to go out for walks,

and with his family attended divine service on Christmas Day at the German Church at San Remo. Morell Mackenzie took the opportunity of his patient's well-being to pay a professional visit to Algiers. He stayed there over Christmas, returning to San Remo on 27th December. Mackenzie had telegraphed Dr. Reid on 17th December: "Appearance much more favourable than beginning November, but impossible to speak with certainty as to nature of disease." On 23rd December Mark Hovell had telegraphed: "Appearances continue favourable, growth ulcerating, swelling of adjacent tissues almost gone." When Mackenzie returned he telegraphed: "New growth almost disappeared. Return home Thursday."

The atmosphere at San Remo continued to be optimistic, and the theory began to gain ground that, after all, the Crown Prince's malady might turn out to be perichondritis and not cancer. Advice continued to pour into San Remo from Berlin and elsewhere. The Crown Princess was misrepresented in the German newspapers as having prevented the operation in May, forced Morell Mackenzie upon the Crown Prince, and kept away everyone else who might have saved him. It was suggested in some quarters that Prince William would be a better ruler than an emperor suffering from an incurable disease, and the Crown Prince was much excited and upset when he found that the Emperor had appointed Prince William to sign all State papers in his stead, whenever he (the Emperor) felt unable to do so, without any notification to his Heir-Apparent until some days after it had been arranged. The Court and Government circles were annoyed to think that Morell Mackenzie and Mark Hovell were perfectly independent and not—like von Bergmann and Gerhardt—State employees of the German Government, and so "took no orders from Berlin but were guided by their duty towards their patient", as the Crown Princess wrote to Queen Victoria: a sensible commentary on State-controlled medicine. Prince William and his younger brother Prince Henry provoked the Crown Princess by maintaining—misled by the Court—that their father was already lost through the actions of their mother and the English doctors.

At the time of Queen Victoria's Jubilee the Crown Prince had deposited for safe-keeping with the Librarian at Windsor Castle three iron-bound wooden boxes containing his personal papers,

as he thought they would be safer there than in Berlin and he expected to be sent during the next winter on a journey to a foreign country. His "War Diary" was not among these papers and at San Remo the Crown Prince made up his mind that it would be safer in England with the other documents. As, however, he was now surrounded by certain officials and servants—such as Count Radolinsky, who had been appointed by Bismarck, and Beerbaum, one of his two nursing orderlies, who had been installed by von Bergmann—on whom he could not rely to act in his interests, he thought it wiser that the diary should be sent secretly. Long afterwards Mark Hovell related the story of the stratagem that achieved this object, for he was taken into the secret and devised the means. The three volumes of the diary were laid quite openly on a table in the drawing-room of the Villa Zirio, and late one night Mark Hovell received an urgent call, ostensibly to England. As he passed through the drawing-room he lifted up the diary and hid it under his coat. Early next morning it was realized by one of the Bismarckians that the diary had gone as well as Mark Hovell, and agents were given telegraphic instructions to watch all routes to England, examine Hovell's luggage carefully, and extract the three volumes. No trace, however, of Mark Hovell was found, and three days later he returned unperturbed to San Remo. He had taken train to Berlin, where he arrived in the early hours of the morning, and went direct to the British Embassy. A night porter was on duty, but he refused to allow Hovell to see any of the staff. Hovell insisted on seeing the Ambassador, Sir Edward Malet, in person, saying that his business was urgent and brooked of no delay. He was so persistent that at length the Ambassador was awakened and came down in his dressing-gown to interview Hovell. After a brief explanation Sir Edward Malet grasped the urgency of the matter and sent off a special messenger to London with the precious diary in a diplomatic bag. Its importance—as was realized after its author's death—was that it told the truth about the decisive part which the Crown Prince had played both at Koniggrätz and at Versailles, whereas Bismarck had always given the world to understand that he himself was the only builder of the German Empire, and that the Crown Prince had but a very minor and unimportant *rôle*.

On 5th January Mark Hovell telegraphed: "Condition of larynx not so good, slight swelling of right side, no cause for anxiety, am writing to you." On 15th January he telegraphed: "Since yesterday Crown Prince little feverish, slight swelling appeared below left vocal cord, will telegraph again to-morrow." On 17th January, however, after a violent fit of coughing, the patient expectorated a large slough from the larynx, (nearly two inches long, by half an inch wide, by one eighth of an inch thick) which, when examined in due course by Professor Virchow, was reported to be a necrosed part of the inner surface of the larynx, but without any cartilage present in it and without any evidence of gangrene—cancer was not even mentioned. With the approval of the Crown Prince, this negative report (Mackenzie in a telegram called it "certainly favourable") was published later in the *Berliner Klinische Wochenschrift*. The condition of the larynx became comparatively comfortable after this extrusion of dead tissue, but the local disease appeared to be entering on a phase of fresh activity and the doctors in attendance decided to recall Morell Mackenzie. Mackenzie arrived at San Remo on 29th January and found the Crown Prince looking well, but thinner; the left side of his larynx was healthier, but below the left cord was a red, slightly raised scar and below the right vocal cord a swelling. A non-committal bulletin was issued, to the effect that "the patient's general condition is normal", and the correspondent at San Remo of the *Vossische Zeitung*, who avowedly derived his information direct from Mackenzie, telegraphed to his newspaper that the Crown Prince's recovery could only be slow, even if perichondritis were the disease present: "'There were cases of perichondritis,' said Sir Morell Mackenzie, 'that were very like cancer, while, on the other hand, perichondritis could occur with several other diseases.'"

On 3rd February Mackenzie went professionally to see an urgent case at Barcelona. He returned to San Remo on the 7th, when he examined the Crown Prince and reported that "at present there are no indications for tracheotomy, though it is not improbable that this operation will ultimately be found necessary". On the morning of 8th February the doctors found that the Crown Prince had not had a very good night, though by evening he said that he felt very well. That evening, how-

ever, Morell Mackenzie sent word to Dr. Bramann—Professor von Bergmann's first assistant, who had been at San Remo ever since the middle of November, by the Emperor's orders, in case tracheotomy might become urgently necessary—that he should be glad if he would take part in the morning consultation next day. When in the morning he examined the larynx Mackenzie found the whole of its left side very much swollen and inflamed, and on the right side the sub-glottic region, below the vocal cord, was also red and swollen. Mackenzie, therefore, supported by Krause and Mark Hovell, urged that tracheotomy should be performed forthwith, though Bramann and Schrader said that they preferred to wait until Professor von Bergmann could arrive from Berlin. Mackenzie then said that he must decline any further responsibility if tracheotomy were postponed; ice compresses were applied to the Crown Prince's throat in an attempt to reduce the inflammation, and he was warned that tracheotomy might have to be performed in a few hours. Mackenzie telegraphed to Dr. Reid: "Swelling has increased. Tracheotomy will be done to-day. Please inform Prince of Wales as I have no cypher for him."

## v

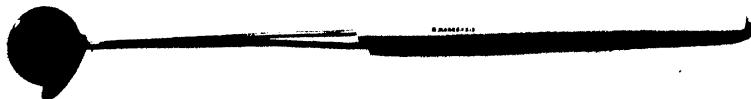
At three o'clock in the afternoon of 9th January the operation of tracheotomy was performed by Dr. Bramann. It must be curious for a modern anæsthetist to read that chloroform in an important case such as this was given by the surgeon himself and its administration afterwards continued by the patient's resident surgeon, Dr. Schrader, while Morell Mackenzie kept his finger on the pulse of the left wrist (quite mistakenly, for the respiration is affected before the heart by chloroform and it is the breathing that should be watched). Bramann performed the operation skilfully—though only a young man he had previously done over four hundred tracheotomies, mostly, however, on children with diphtheria—and Mackenzie in his *Frederick the Noble* lays undue stress on the fact that the incision was made slightly to one side of the mid-line of the neck—a matter of no importance. The operation was performed in one of the large drawing-rooms of the Villa Zirio, turned into a bedroom, and the Crown Princess waited next door until the opera-



THE VILLA ZIRIO, SAN REMO.



MORELL MACKENZIE'S  
OPERATING CHAIR.



LARYNGOSCOPE BELONGING TO MORELL MACKENZIE.

This instrument was given, after Sir Morell Mackenzie's death, by Lady Mackenzie to Mr. Mark Hovell, and on his death by the Hon. Mrs. Hovell to Dr. Irwin Moore, who presented it to the author of this book.

tion was over and then did not leave her husband's side for two days and two nights.

The swelling in the larynx settled down after the tracheotomy and the Crown Prince was soon out of bed and about again. At his request Morell Mackenzie drew up a report for the Emperor, which was also published in the *British Medical Journal* and *The Lancet* of 18th February and in the leading German medical journals. The statement read as follows: "His Imperial Highness the Crown Prince of Germany having expressed his wish that I should now place on record my opinion of his case, the opportunity is afforded of correcting some of the statements which from time to time have been inaccurately attributed to me. The general idea is that I am of opinion that the disease from which His Imperial Highness is suffering is not cancer; the view, on the other hand, which I have consistently maintained, is that there never has been any proof of the existence of cancer." Mackenzie then went on to give details of the course of the case, the various examinations, and Professor Virchow's reports. The statement ended: "In my opinion, the clinical symptoms have always been entirely compatible with non-malignant disease, and the microscopic signs have been in harmony with this view. I need only add that, although in nearly every case of laryngeal disease it is possible at the first inspection to form an accurate opinion as to the nature of the disease presenting itself, yet in a few rare instances the progress of the complaint alone permits its character to be determined. Unfortunately, the case of His Imperial Highness is among the latter number, and at this moment medical science does not permit me to affirm that any other disease is present than chronic interstitial inflammation of the larynx combined with perichondritis."

Following the publication of this report there was—according to *The Times*—a universal feeling of profound uneasiness. The *Berliner Tageblatt* published a most pessimistic telegram from San Remo, and at once the *Vossische Zeitung* rushed out a special edition to deny, on the authority of Sir Morell Mackenzie, the alarming statements. There was a general belief, however, that Morell Mackenzie had never been able to convince himself unreservedly that the Crown Prince was not suffering from cancer, and his whole statement tended to bear

this out. Mackenzie postponed indefinitely his return to England, and to keep him company in his enforced absence from home the Crown Princess invited his eldest daughter Ethel out from England to the Villa Zirio; she arrived at San Remo on 19th February. This was another cause of offence to German Court circles. Rennell Rodd, who was at that time a secretary at the British Embassy in Berlin, says in his reminiscences that a Court official remarked to him "with bitterness that a member of Mackenzie's family had been admitted to close intimacy with the young princesses". *The Times* reported on 22nd February that "A party, consisting of the Prince of Wales, the Crown Princess and her three daughters, Prince Henry, the Grand Duke of Hesse, Princess Irene of Hesse, and Miss Mackenzie, went this afternoon to the lawn-tennis ground, and the younger members of the party played several games". Before Miss Mackenzie left for England on 4th March, after a stay of a fortnight, Prince William, the future German Emperor, had also joined his family, so that the feelings of the Berlin Court officials must have been completely outraged at the presence of the plebeian "English miss". No wonder the story was told in a German illustrated journal that Mackenzie's real name was Moritz Markovicz and that his grandfather was a Polish Jew who had settled in England; sympathetic correspondents wrote to Mackenzie—who was proud of his Highland descent—from different parts of Germany asking him to give proof that he was not of Jewish origin. "I need not say," answered Mackenzie, "that if I really did belong to the remarkable race which has produced so many men of the highest distinction in every department of literature, art, and science, so far from being ashamed of such an extraction I should be proud of it." Not that anti-semitism was very marked in Germany at this period, except in Conservative Court circles, where business people in general were equally looked down upon; for one of Prince William's school-fellows was Jewish, and Felix Semon, who was a Jew, retained all his life his boyhood friendship with the two sons of Prince Bismarck.

Mackenzie became a familiar figure as he went for drives in an open victoria, morning and evening, along the coast roads round San Remo, dressed in a large-checked Inverness cape and a soft grey hat. He looked at no one as he drove by, with features impassive, but all looked at him; when the Crown Prince

showed some improvement in health Mackenzie held his head higher; when he ascended the steps of the Villa Zirio he walked slowly and solemnly, as if he carried all the weight of a State secret. Besides the Crown Prince and Princess and the doctors there were two other interesting characters at the Villa Zirio—the Rozencrantz and Guildenstern of this tragedy: Count Seckendorff and Count Radolinsky. Seckendorff, Chamberlain to the Crown Princess, was the cavalier of romance, who like a medieval knight made a cult of devotion to his Lady; but his ceaseless care for the interests of the Crown Princess brought him bitter enemies in Berlin, who whispered among themselves that Seckendorff was the Princess's lover. His acquaintances did not fail to tell him of the rumours, and he offered his resignation to the Crown Prince, who refused to accept it. Radolinsky, Marshal of the Crown Prince's Household, was the opposite—the villain of melodrama; a creature of Bismarck's, he reported to him daily, opened and read telegrams and letters, and bribed servants to repeat gossip and tell lies.

## VI

Professor von Bergmann had arrived from Berlin on 11th February, after the tracheotomy had been successfully performed and the patient was well on the way to recovery from the operation. There was a certain amount of irritation in the trachea from the tracheotomy tube and different types were tried—Mackenzie in *Frederick the Noble* seems unnecessarily emphatic about the possible harm that Bramann's large tubes caused and the corresponding great relief that his own "San Remo" cannula (made by a local silversmith) brought about; there is little doubt that the typical English laryngologist's gentleness of Mackenzie and Mark Hovell contrasted very much with the typically inconsiderate, even when effective, German surgeon's touch of von Bergmann, and was one of the reasons which led the Crown Prince to prefer the attendance of the English specialists.

On 15th February Mackenzie telegraphed: "Crown Prince going on well, but there has been a little trouble with the cannula, which has interfered with his sleep." On 16th February he telegraphed again to Dr. Reid: "Crown Prince has not had

good night. Cannula irritated trachea, causing slight haemorrhage, not dangerous at present but may cause trouble in future. After-treatment entirely in hands of German surgeons who are unwilling to receive suggestions from me. I only remain here at urgent desire of the Crown Princess: I am entirely dissatisfied with treatment. Much regret the Queen did not receive first intelligence of operation. Reuter's telegram was a correct guess." Dr. Reid apparently communicated a milder version of this telegram, for Queen Victoria noted in her journal on 16th February: "Sir M. Mackenzie does not seem quite satisfied with the treatment of the German surgeons, but I have begged him to remain on for the present." Mackenzie replied to Dr. Reid next day: "Queen's commands will of course be obeyed, I shall continue here for the present. Tracheotomy having been performed, surgical treatment must remain for a few days in hands of surgeons." On 21st February he telegraphed: "Misfitting cannula cause of sanguineous expectoration. Yesterday German surgeons gave way to me and probably things will go better now with my cannula, though it may take few days to recover lost ground. No pneumonia." The haemorrhage caused by the large tube in the trachea made von Bergmann suspect an extension of disease to the lungs, and at his insistence the venerable Professor Kussmaul of Strassburg was called in consultation. Kussmaul annoyed Mackenzie by attempting to examine the patient with a laryngoscope, of which he knew nothing—the Crown Princess described it to Queen Victoria as "a very comical proceeding, I assure you! He saw nothing, but imagined he saw a great deal and described quite fantastically what he did see!" On his own ground, however, Professor Kussmaul was more edifying and declared himself unable to find the least evidence of pulmonary disease of any kind. He also examined with a microscope some prepared specimens of the matter discharged from the throat, and gave a pessimistic opinion based upon them. Morell Mackenzie declined to enter into a pathological argument with Kussmaul, and suggested that the specimens should be submitted to an authority on pathology, if not Professor Virchow (who was having an archæological holiday in Egypt and was not available) then Professor Recklinghausen of Strassburg or Professor Waldeyer of Berlin—the latter was agreed upon. On 4th March Waldeyer showed Mackenzie

several preparations he had made, in some of which were a large number of "nest-cells"; in his opinion these were "the result of a deep-seated destructive process". Mackenzie, convinced by the microscope, said that he "no longer had reason to doubt that the morbid process was of a cancerous nature". He telegraphed to Dr. Reid: "Waldeyer not yet given official report but informs me that considers it cancer, but has not found any alveolar structure . . . Crown Prince has had excellent night: very little blood."

On 6th March, at a general consultation, von Bergmann brought with him a document which, after undergoing slight modification, was accepted by all present. It was as follows: "In view of the rumours circulated in the Press about differences of opinion among the physicians in attendance on His Imperial and Royal Highness the Crown Prince of the German Empire and of Prussia, the undersigned declare that there are no differences of opinion among them regarding the nature of the disease. Just as little have they maintained that the malady is likely soon to take a dangerous turn. The sole responsible treatment is now, as it was before the operation, in the hands of Sir Morell Mackenzie. To the newspapers of Germany and other countries, the physicians, in the interest of the illustrious patient and of the nations which love and revere him, once more make the request that they will refrain from all discussion of the disease, or of the methods and instruments used in its treatment." This was signed by Morell Mackenzie, Schrader, Krause, Mark Hovell, von Bergmann, and Bramann. A few days later on 10th March, Mackenzie telegraphed to Dr. Reid: "Though Waldeyer did not discover anything which Virchow did not find, former positively states disease is cancer. My opinion being based on microscopic evidence, in absence of Virchow, I cannot go against Waldeyer."

On 8th March news reached San Remo that the aged Emperor was in a critical condition. In Berlin the Royal theatres were closed, the troops were confined to barracks, and the newspapers published special editions with bulletins more serious every hour. Next day, 9th March, Berlin was a city of mourning, and the President of the Reichstag announced: "The great Emperor who founded Germany's unity is dead." The Crown Prince was at the Villa Zirio when the news was brought of his

father's death. The household gathered in the drawing-room and in a little while the new Emperor and Empress entered. Seated at a small table the Emperor Frederick III wrote out the announcement of his own accession and then invested his Empress with the Order of the Black Eagle—the highest Order within his gift, the German equivalent of the Garter. Next he greeted Morell Mackenzie and wrote out for him the following words: "I thank you for having made me live long enough to recompense the valiant courage of my wife." He sent the following telegram to Queen Victoria: "San Remo. 9th March, 1888. At this moment of deep emotion and sorrow at the news of my father's death, my feelings of devoted affection to you prompt me, on succeeding to the throne, to repeat to you my sincere and earnest desire for a close and lasting friendship between our two nations." For the information of Queen Victoria Mackenzie telegraphed to Dr. Reid: "Emperor says State reasons make it absolutely necessary for him to return to Berlin. He thanks the Queen for her kind thought of him. I have taken every precaution to ensure that railway carriage shall be kept properly heated during entire journey."

At nine o'clock next morning the Emperor and Empress, accompanied by Morell Mackenzie and Mark Hovell, left San Remo for Berlin in a special train, arriving thirty-six hours later in a blinding snowstorm. For the sake of quiet and privacy they went to the small palace of Charlottenburg, situated in a large park in a western suburb of Berlin, instead of to one of the more public royal residences in Potsdam or Berlin—as if in London they might have gone to Kensington Palace in place of Buckingham Palace.

## CHAPTER SIX

### NINETY-NINE DAYS

#### I

THE Emperor, now dressed in full uniform, was met at Leipzig by Prince Bismarck, Count Eulenburg, and other high State officials, when various large documents were at once produced and business began to be transacted, the Emperor expressing himself in writing. Between Leipzig and Berlin Bismarck had a long conversation with Morell Mackenzie, requesting him to lay down definite rules about the number and duration of interviews which the Emperor should grant each day, and said that he was anxious to assist Mackenzie in every way to save the Emperor worry and fatigue. The abrupt change from the sea and sunshine, flowers and restful atmosphere at San Remo to the snow and slush, bustle and constant affairs of State at Berlin, was very trying to the patient. The partisans of Bismarck and Prince William blamed the Empress bitterly for bringing the Emperor back to Berlin in mid-winter and argued that a regency by Prince William would have been better from every point of view. On the other hand, it was suggested by the opponents of Bismarck, (and even printed in the London *Contemporary Review*) that he had deliberately brought the new Emperor from San Remo to Berlin in the depth of winter and a snow-storm, having calculated "that the chapter of accidents might during the journey accelerate the progress of the disease. For what—it was asked by those who thought the Chancellor capable of any crime which forwarded his cause—other conceivable motive could Prince Bismarck have had in declaring that he could not answer for the consequences if the unfortunate Emperor did not cross the Alps in the depths of a severe winter?" The answer to these charges and counter-charges is given by Morell Mackenzie. The decision to return to Berlin was taken by the Crown Prince himself immediately before his father's death, when the aged Emperor was in a critical condition. "His

Imperial Highness sent for me," wrote Mackenzie, "and asked: 'Will there be any danger in my returning at once to Berlin?' I answered: 'Yes, sir, there would be some danger.' He then said: 'There are some occasions when it is the duty of a man to run risks, and such an occasion is now before me. I shall return the day after to-morrow. I shall be obliged to you to make whatever medical arrangements you think necessary, and to confer with Count Radolinsky on the subject. I look to you to take all steps possible in order to reduce the danger of my journey north to a minimum.'"

Sir Edward Malet, the British Ambassador at Berlin, reported to Queen Victoria that on his arrival at Charlottenburg the Emperor walked swiftly and erect, but the Empress looked aged since he had seen her last. Morell Mackenzie told him that the Emperor had borne the journey well and that the Ministers, who had been to meet him at Leipzig, had been surprised at his appearance, having been deceived by the unfavourable accounts that had reached them. The Prince of Wales, who went to Berlin for the funeral of the old Emperor, said to Queen Victoria that the Emperor Frederick did not look ill, but was much thinner: "He had, however, a hunted, anxious expression, which was very distressing to see. The danger was lest any accidental chill, or over-fatigue, might bring on alarming symptoms." General von Loë, who had previously been in England with the then Crown Prince and Princess at the time of the Jubilee, told Queen Victoria, when she received him at this time at Windsor, that "there were many things which were more difficult for the Emperor Frederick than for his father. As for the doctors, there ought not to have been so many, and whoever the Emperor trusted and had confidence in, as he had in Sir Morell Mackenzie, should be left in undisturbed attendance."

On 12th March a bulletin was issued from Charlottenburg, signed by Morell Mackenzie, Wegner, Krause, and Mark Hovell: "His Majesty passed a good night and to-day he feels no inconvenience." On the same day the Emperor wrote a long letter to Bismarck inviting him to continue as Chancellor of the German Empire. "On assuming power," wrote Frederick III, "I feel the necessity of addressing you, the long-tried first servant of my father, who now rests in God. You have been the faithful

and brave adviser who gave shape to the aims of his policy, and secured their successful realization. I and my House are and remain most grateful to you. You, therefore, have, above all, a right to know the principles which will direct me in my rule." The Emperor went on to speak of the importance of maintaining unweakened the defensive forces of the country, of his intention of supporting all efforts destined to further the economic progress of every class of society, and to mitigate unavoidable social inequalities "without, however, exciting the expectation that this can be done by State interference". For the realization of his intentions the Emperor said that he relied on the oft-proved devotion and on the support of the tried experience of Bismarck. He concluded: "Not caring for the splendour of great deeds, nor striving for glory, I shall be satisfied if it be one day said of my rule that it was beneficial to my people, useful to my country, and a blessing to the Empire."

## II

Many opponents of Bismarck anticipated that one of the first acts of the new Emperor would be the dismissal of the Chancellor, with whose policy he had often been at variance in the past; but Frederick III recognized the importance at that critical time of avoiding any immediate radical change in the direction of the affairs of the Empire, and relations between Bismarck and both Emperor and Empress were cordial—the Empress told her mother that she found him "civil and nice". On the other hand, the reactionary party had expected that the Emperor would return to Berlin merely to resign, and all sorts of intrigues were going on in the belief that the new reign would last only a very few months.

Frederick III was very anxious to attend the funeral ceremony of his father, and Morell Mackenzie had some difficulty in persuading him not to do so. It required, he said, all the firmness he could command to induce the Emperor to give way, for the weather was bitterly cold, with sharp frost and deep snow. He telegraphed to Dr. Reid: "Morning is so very cold that unless sun comes out later, Emperor will be unable to leave the Palace. Emperor fairly well to-day, but last few days have rather taxed his nervous system." The weather continued

severe until nearly the end of the month, snow falling almost continuously, and the patient settled down to a routine of life indoors. Fortunately at Charlottenburg there was an orangery—though the glass-work occupied only one side and the orange-trees were old, thick-stemmed and covered with leaves—and in it the Emperor spent most of his mornings and afternoons. He breakfasted in bed, then went down to the orangery, gave audiences to ministers or other officials there or in his study from ten o'clock to twelve, went back to the orangery until luncheon, then rested for an hour or two. After his siesta the Emperor usually saw Prince Bismarck or his son William, now Crown Prince, then attended to any further State business, signed papers and wrote up his diary, dined at eight o'clock and went to bed about half-past nine or ten. Either Morell Mackenzie or Mark Hovell was in constant attendance during the course of the day and within call at night. On 20th March Mackenzie telegraphed to Dr. Reid: "Emperor passed excellent night and feels particularly well this morning"; and on 24th March he sent the following surprising telegram: "Some loose cartilage has come away through tracheal wound, showing that perichondritis is largely concerned in morbid process, and disease may after all possibly be limited to that affection."

Spring came suddenly that year, and on 28th March the weather was bright and the patient was able, for the first time since his return to Germany, to walk in the open air outside the orangery. Mackenzie sent a telegram to Dr. Reid: "The local condition is better than it has been for some months, but there is no certainty that the favourable condition will be permanent." Next day the Emperor, dressed in the ample blue cloak of the Prussian cavalry, and wearing a field cap, went with the Empress for a drive in an open carriage to the Grünewald woods, accompanied in another carriage by Mackenzie and one of his adjutants. On 30th March it was a lovely spring morning and Morell Mackenzie said to the Emperor: "A fortnight ago, sir, you asked me if you might drive into Berlin to pay a visit to Her Majesty the Empress Augusta, and I felt obliged to tell you that it would be dangerous for you to leave the house. To-day I think you may safely go." The Emperor's face beamed with pleasure and he shook Mackenzie warmly by the hand. In the afternoon sunshine the Emperor and

Empress drove in an open carriage from Charlottenburg into Berlin, the first time he had entered his capital since his return from San Remo. Other carriages followed containing the princesses and some of the Household officers, including Morell Mackenzie. The Emperor was enthusiastically greeted by the surprised holiday crowds in Unter den Linden, and, as the last carriage passed, there was much raising of hats, handkerchief-waving, and cries of "Mackenzie! Mackenzie!" It amused the laryngologist to remember that only a day or two previously the *Kölnische Zeitung* had printed: "Mackenzie dare not let himself be seen in Unter den Linden, because if he showed his face there the people would tear him to pieces or stone him to death." On that same day *The Times* published the news, as a matter of general interest, that one of the most eloquent Socialist deputies in the Reichstag had died at Breslau only a week after surgical extirpation of his larynx. Rennell Rodd wrote from Berlin on 22nd March to his friend Leveson-Gower: "Mackenzie is the object of a sort of fanatical hatred on the part of the populace here. They all seem to think that if the German doctors had been allowed to perform the operation *ab initio* he would have been cured, whereas he would probably have been killed, but you can imagine how disagreeable it all is."

On 3rd April the Emperor said that he felt better than he had done since the tracheotomy, but within the next few days fragments of cartilage came away from the trachea, and the windpipe began to lose some of its rigidity. Mackenzie telegraphed to Dr. Reid on 5th April: "The local condition remains unchanged. The general health is fairly maintained. The Emperor's sleep has been lately a good deal interrupted, but last night he slept well." On 9th April, however, he telegraphed: "Emperor has had good night, but I consider losing ground constitutionally." Morell Mackenzie had intended to go back to London about this time, but the Emperor asked him to postpone his return, saying apologetically: "I expect your patients in London must quite hate me for keeping you here." To show his appreciation, on the evening of the 10th April the Emperor handed to Mackenzie the Cross and Star of the Hohenzollern Order, conferring at the same time on Mark Hovell the Second Class of the Order of the Crown. These decorations apparently did not meet with the approval of the Court, for Rennell Rodd—who got his

information from a Court official—says in his reminiscences that the manner was resented in which Mackenzie “repeatedly pressed his claims for a decoration, as though he seemed to be anxious lest the end should come before he received it”—a piece of gossip for which the circumstances show no basis in fact. Dr. Krause was appointed Professor Extraordinary in the University of Berlin—a royal appointment which raised that laryngologist’s standing in his own profession in Germany. The Emperor signalized his accession by a widespread distribution of honours and decorations; many of the recipients belonged to classes and parties hitherto rigidly excluded from Court favour, and their names filled a dozen closely-printed columns in the official gazette. The Emperor further granted an amnesty to persons imprisoned for political and press offences and to minor misdemeanants; ordered that the Dom at Berlin should be enlarged and converted into a cathedral worthy of a capital city; and ruled that the New Palace at Potsdam—his own favourite summer residence—was to be called in future Schloss Friedrichskron, in memory of its builder, Frederick the Great.

## III

On 12th April an incident occurred which deepened the antagonism between the German and the English doctors and proved indeed to be one of the turning-points in the case. Slight inflammatory symptoms had again appeared in the Emperor’s throat and during the night of 11th April Mark Hovell was called several times to his patient, relieving him on each occasion by readjusting the tracheotomy tube. When Morell Mackenzie examined him along with Drs. Krause and Wegner in the morning, he tried the effect of a shorter tube, but this, although it helped at first, did not give permanent relief. Mackenzie therefore resolved to use a tube with a different curve and, to save time, instructed Windlers, the instrument-makers in Berlin, to make a temporary tube of lead, so that the curve could be readily altered if necessary. As the tube was to be of a different type from any of those used so far, Mackenzie thought that Professor Bergmann should be present when the cannula was inserted. Accordingly he sent a message into Berlin to Bergmann, asking him to come out to Charlotten-

burg *as soon as possible* (underlining the last four words). Bergmann took this message as meaning that an acute emergency had arisen in the case and came out about five o'clock in a state of extreme excitement. With Mackenzie and Mark Hovell each carrying several tracheotomy tubes, he proceeded to the Emperor's room where—according to Mackenzie's narrative—the patient was found engaged in writing: his respirations were audible, but there was no indication of any real difficulty in breathing. Placing a chair opposite the window Professor Bergmann asked the Emperor to sit down upon it, quickly untied the tapes that held the existing cannula in position, pulled it out and tried to insert a new one which he had in his hand. The instrument was forced into the neck, but no air came through it. The Emperor's breathing thereupon became greatly embarrassed, followed by a violent fit of coughing. Bergmann then took up a Hahn's sponge tampon-cannula, removed the sponge, and tried to insert this into the trachea. Again no air came through, for the cannula, instead of entering the trachea, was apparently forced in front of it, into the tissues of the neck, making what is called a "false passage". Bergmann then pushed his forefinger into the wound and on withdrawing it tried to pass another tube, but unsuccessfully, and sent out to his carriage for his assistant, Dr. Bramann, who was waiting there. Bramaan took a medium-sized cannula and at once passed it without any difficulty into the trachea. For about two hours after the departure of von Bergmann the Emperor coughed incessantly and continued to bleed from the tracheotomy opening, but the symptoms gradually diminished and he had a good night; indeed, next day he was able to go out for a walk. Before he went to sleep the Emperor sent for Mackenzie and said: "Why did Professor von Bergmann put his finger into my throat?" Mackenzie answered: "I do not know, sir." According to Mackenzie, the Emperor then went on to say: "I hope you will not allow Professor von Bergmann to do any further operations on me." He answered: "After what I have seen to-day, sir, I beg most respectfully to say that I can no longer have the honour of continuing in attendance on Your Majesty if Professor von Bergmann is to be permitted to touch your throat again." He telegraphed that evening to Dr. Reid: "Emperor feels much better to-day, but we have had serious trouble with

the cannula this morning. I hope it is now mending." A few days afterwards the Emperor seemed to have developed bronchitis—his temperature on the evening of 15th April was 103° F., according to a telegram from Mackenzie to Dr. Reid—and Mackenzie felt "very anxious" about his patient, until a localized abscess burst, as is described later.

Other accounts of the affair were published at the time which were completely at variance with Mackenzie's. *The Times* reported: "It was resolved to insert a new and larger cannula and this was deftly done by Professor von Bergmann himself, whose assistant, Dr. Bramann, remained all the night at Charlottenburg." The *Kölnische Zeitung*—a journal which was in close touch with von Bergmann and faithfully recorded his views—said that Mark Hovell, while trying to adjust the cannula during the night, injured the trachea and pushed fragments of diseased tissue into the lungs. This brought on repeated attacks of suffocation, and after several hours' delay, Professor von Bergmann fortunately arrived in time to save the Emperor's life by introducing a new tube. The *Kreuz-Zeitung*—the organ of the old Prussian Court party—went into greater detail: "We hear that the difficulty in breathing which the Emperor had to suffer on Thursday was due to a swelling under the opening of the cannula. As Sir M. Mackenzie knew not what to do (*rathlos war*) in view of this alarming state of things, Professor von Bergmann had to be summoned in all haste and the latter soon succeeded in relieving His Majesty by inserting a new cannula. It must be looked upon as a very fortunate circumstance that Professor von Bergmann could be fetched so rapidly from Berlin, and we hear that care has now been taken to have either him or Dr. Bramann always at hand in future, so as to obviate such accidents."

Morell Mackenzie replied at once to the *Kreuz-Zeitung* which, in view of a threat of legal proceedings, printed his letter in full: "The statement that I knew not what to do and for this reason sent for Professor von Bergmann on Thursday the 12th inst. is absolutely false. The truth is, as Professor von Bergmann has conjoint care with me of the surgical treatment of His Majesty the Emperor, I thought it would be more courteous to invite the assistance of the eminent surgeon while I substituted a new and more suitable cannula for the one which no

longer answered its purpose. As Professor von Bergmann on his part appeared desirous to introduce the new cannula I offered no objection. But this effort was unsuccessful and the new cannula had to be put in after all by Dr. Bramann. As my courteousness has given rise to inaccurate statements by you and others, I have since that time changed the cannula whenever I deemed it necessary or desirable to do so without calling in Professor von Bergmann."

Morell Mackenzie and Mark Hovell felt so strongly about the matter that they addressed a joint letter to the editor of *The Times*, which was published on 24th April: "We beg to inform you that the statements in the *Kölnische Zeitung* and *Kreuz-Zeitung* of a recent date respecting an incident which occurred in connection with the illness of His Majesty the Emperor of Germany on the night of Wednesday the 11th are absolutely false and, as regards one of us, distinctly libellous. Legal action against the papers in question has been taken. We must beg of you to immediately correct the false news which you have been the means of disseminating. Charlottenburg. April 20."

Mackenzie took serious exception to the reports in *The Times* regarding the incident of the cannula and wrote to Charles Lowe, *The Times* Berlin correspondent, accusing him of siding with and currying favour with "the military party" and sympathizing with Mackenzie's German critics. Lowe had previously telegraphed to Mackenzie on his return to Berlin from San Remo: "I should like to see you, but in any case I am always at your service." But on 17th April he wrote: "I need not say that, before reproducing that report in the *Cologne Gazette*, I should have preferred consulting you as to its accuracy, so as to be able to place it before our readers weighted, if necessary, with corrective or destructive criticism. You deprive me, however, of the means of rendering you such services. But as truth and fairness are, and must be, my sole principle of action, I take this further and last opportunity of repeating that, where reputation and national honour are concerned, I am always at the disposal of you and your English colleague." Mackenzie replied to this: "I have only to add that many friends and even perfect strangers, both in Berlin and England, have written to me expressing regret that a paper so highly esteemed as *The Times* should be so unworthily represented in this city. With

this opinion I entirely agree." Lowe answered as follows: "There was one recent occasion, it is true, when my journal was indeed most 'unworthily represented here', and that was when, at the beginning of last November, I confidently reported to it as to the state of your illustrious patient on the strength of telegrams you sent me from San Remo—telegrams which were utterly irreconcilable with the official announcement (subscribed to by you) on the 11th of that month."

Mackenzie ended the controversy by saying that he would take steps to give publicity to this correspondence, and had it published in many newspapers throughout Britain, including *The Scotsman*, the *Pall Mall Gazette*, and the *St. James's Gazette*. The editor of *The Times* deprecated any continuation of the argument by Lowe in its columns, but in future took an unfavourable view of Morell Mackenzie; doubtless this helped to bring about the inadvertent publication in a law report of the libellous letters regarding Mackenzie which culminated in his libel action in March, 1890.

On 30th April a new signature, in place of von Bergmann's, appeared at the bottom of the bulletin of the Emperor's illness—that of Professor Bardeleben, chief of the surgical section of the Charité Hospital. On hearing the rumour that Professor von Bergmann had retired from the case, the correspondent of *The Times* at once went round to interview him. Bergmann assured him that the rumour was true, and that he had taken this serious step "purely on account of the treatment he had received at the hands of Sir Morell Mackenzie, to whom he had written declining to have any further personal intercourse with him." He felt that a great wrong had been done him in the eyes of the world by what he deemed a most insufficient admission on the part of his English colleague, and he showed *The Times* correspondent Morell Mackenzie's note to him: "Dear Professor von Bergmann, We are having some difficulty with the cannula and I shall be glad if you will see the Emperor with me *as soon as possible*"—pointing out that the last four words had been underlined by Mackenzie. The note had been brought to von Bergmann by a mounted courier, riding *ventre à terre*, who did not find him at home but at a hotel in the town. He started at once with Dr. Bramann, only stopping to collect some instruments at his house, where he found that his servant had

already had two telephone messages from Charlottenburg, inquiring whether the professor had yet been found and asked him to hurry—though from whom the telephone messages came he did not know. Professor von Bergmann told *The Times* correspondent that he had received letters from private practitioners in England “congratulating him on the correct professional reserve he had observed throughout”, among these correspondents being Felix Semon, as he tells in his autobiography.

In the official report of the doctors in attendance on the Emperor, von Bergmann later gave his own detailed version of the happenings at Charlottenburg. He said that he was received by Surgeon-General Wegner and heard from him that “from one o’clock in the morning and in the course of the day the Emperor had had some difficulty in breathing”, as was in fact recorded in Wegner’s case-notes. Conducted at once to Mackenzie he found him with an instrument-maker from Windlers’, employed in bending a leaden tube so that it could be inserted deeply into the trachea, intending in this way to prepare a suitable cannula quickly. Bergmann showed Mackenzie that he had a Hahn’s sponge-cannula, which had exactly the curve that was now recognized as suitable, removed the sponge from it, and hurried with Mackenzie to the Emperor. He was shocked “to find the august patient sitting upon a chair in a state of suffocation: his cheeks and lips were blue, there was a stridor in his inspiration which could be heard in the next room, inspiration was in the highest degree difficult, with tension of all the muscles and an indrawing of the front of the chest clearly visible through the opened coat. It appeared to me,” asserted von Bergmann, “that in a few minutes death from suffocation must ensue.” He asked Mackenzie’s permission to summon his assistant, Dr. Bramann, and proceeded to make an examination of the wound. Only the outer cannula of the double tracheotomy tube was in position, for unsuccessful endeavours had been made earlier in the day to introduce the inner cannula. “I explained to Mackenzie,” continued von Bergmann, “that prompt aid was necessary and that, as he had not succeeded in introducing the cannula, the edges of the wound must be held apart with large blunt hooks in order to reach the opening of the trachea. Mackenzie agreed with me and specially admired the long blunt hooks which I

had brought with me." Mackenzie placed himself behind the patient, supporting his head, while Bramann, who had meanwhile entered the room, took charge of the hooks. Even then von Bergmann's efforts met with no success and "after, as a matter of course, I had disinfected my hands in a basin near me filled with carbolic lotion"—Mackenzie insisted in his version that this basin was quite non-existent—he endeavoured to push away the granulations with his finger to reach the tracheal opening, in order to insert one of the hooks in it. As he was holding the hook Bramann successfully inserted a cannula of exactly the same large type as he had used at his operation of 9th February. The Emperor immediately breathed freely and easily "as he showed by joyful movements and by grateful pressure of our hands". The manipulations, von Bergmann admitted, produced some bleeding, but it was quite moderate.

This account of the incident and Mackenzie's are obviously completely irreconcilable. As a critic of Mackenzie said later, Professor von Bergmann could not have attained his position in his profession without having given proofs of manual dexterity, and it seemed inconceivable that he should have been guilty of the clumsiness attributed to him. But there seems no doubt that he was in a state of considerable agitation when he arrived at Charlottenburg—and there is another explanation as well. Bergmann was of Russian origin (he was born at Riga), with the habits of the mid-nineteenth century Slav, and Mackenzie in *Frederick the Noble* uses some curious phrases concerning him when describing the events of 12th April: "Whether his agitation was due to exaggerated reports which he may have received as to the Emperor's condition, or to causes of a more personal nature, I am unable to say; but either from over-excitement or from some other cause, Bergmann behaved in a most extraordinary, indeed altogether unaccountable, manner." And again: "That von Bergmann should have been under the impression that the Emperor felt grateful to *him* because Bramann inserted the tube . . . would tend to show that von Bergmann was not at the time in a condition to observe things accurately." Once more: "I returned to my room and discussed Bergmann's conduct with Mr. Hovell, who, as well as myself, had noticed the strangeness of his manner on his arrival." The italics in these sentences are not in the original.

It could hardly have been printed during Professor von Bergmann's life-time, but years afterwards Mark Hovell, who was an eye-witness of the whole affair and, although an admitted partisan of Mackenzie's, a witness of unimpeachable veracity, stated to the present writer that there was no doubt whatever in his mind that von Bergmann had been drinking and that he swayed from side to side as he tried to insert the cannula. Certainly the Emperor would never allow von Bergmann near him again and as this facsimile of his handwriting (printed afterwards in the *British Medical Journal*) shows, considered that von Bergmann had "ill-treated" him.

The same Hovell  
just tried before  
Bergmann ill-treated  
me

Facsimile reproduction of a note written by the Emperor Frederick III.  
From *British Medical Journal*, 1888, Vol. II, page 835.

At a meeting of the Berlin Medical Society on 2nd May Professor von Bergmann referred to a statement in the *British Medical Journal* (of 28th April) that because he remained silent in face of a statement of facts and personal attacks he acknowledged the correctness of the story (of the false passage), and said: "If the *British Medical Journal* were not a journal whose scientific value I prize highly, I might still remain silent in spite of such an accusation, but under the circumstances I must defend myself. I am not silent because I am in the wrong, but because I, like every honourable British or German physician, do not talk publicly of what goes on at the bedside of a patient." This communication of von Bergmann's was, however, received "with marked coolness" by his colleagues at the meeting.

## IV

Friction began to arise between the Emperor and Empress on the one hand and Bismarck on the other regarding the projected marriage of their second daughter, Princess Victoria, with Prince Alexander of Battenberg, the ex-ruler of Rumania, although Morell Mackenzie says, in *Frederick the Noble*, that "there was a good deal of excitement in the public mind about the proposed Battenberg marriage, but I cannot say that it produced much effect upon the Emperor". At any rate the newspapers, prompted by Bismarck's journalists, said that the Chancellor seriously considered resigning if he did not get his way. The Emperor and Empress liked the young Battenberg prince, "Sandro" as he was popularly called, and for personal reasons were inclined to approve of the marriage; Bismarck strongly opposed it from motives of State policy, for the Czar nourished an implacable resentment against Prince Alexander, whose anti-Russian policy in Rumania had eventually led to his flight from that country. The Empress and Queen Victoria were chiefly blamed for supporting the marriage—even *The Times* correspondent telegraphed from Berlin, quite inaccurately, that "Queen Victoria always was and is believed to be still favourable to the idea of an alliance between her granddaughter and Prince Alexander of Battenberg". The German Emperor was represented as being merely a plastic instrument in the hands of his Consort and cruel and caluminous attacks were made by the "reptile press" on her character and aims, for it was suggested that Britain was trying to embroil Germany with Russia. In actual fact, Queen Victoria was concerned only for the happiness of her daughter and rightly did not believe such wild statements as that of the *Wiener Tagblatt*, that "the rejection of Prince Alexander of Battenberg as a suitor would be a sign that Russia had been given full liberty of action in the East, and that Germany agreed that the road to Constantinople lay open to Russia". It was suspected in some quarters that Bismarck was using the dispute about the marriage to gain political support for himself in Germany and that it was a cloak for deeper and more serious antagonisms.

At this time Queen Victoria was on holiday in Italy and determined to visit her invalid son-in-law at Charlottenburg. Her

daughter, the Empress, wrote begging her not to believe all the grossly exaggerated reports in the newspapers, for she had had a very satisfactory conversation with Prince Bismarck, who had, indeed, threatened his resignation before speaking to her about the marriage. Queen Victoria arrived on 24th April and saw the Emperor "lying in bed, his dear face unaltered, and he raised up both his hands with pleasure at seeing me and gave me a nosegay. Afterwards saw Sir M. Mackenzie with Vicky [the Empress]. He seemed to think Fritz was better." Sir Henry Ponsonby, Queen Victoria's Secretary, had a long talk with Count Seckendorff, the Empress's Chamberlain, who was, he says, "a Mackenzie-ite, but lamented the manner in which this doctorial controversy had become international." Ponsonby insisted that many English were against Mackenzie, but Secken-dorff declared that the conviction in Berlin was that he represented England.

Next day Queen Victoria had a memorable interview with Prince Bismarck. Sir Henry Ponsonby wrote home to his wife that Bismarck, as he was taken through the ante-rooms, appeared to be nervous about meeting the Queen, and he is said to have been seen mopping his brow after the interview. Queen Victoria says in her journal that she had a most interesting conversation with Prince Bismarck and was surprised to find him so amiable and gentle. She made it plain that she was in agreement with Bismarck that the Battenberg marriage would be a mistake, which pleased the Chancellor. She went on to say that she hoped there was no idea of a regency, as this would upset the Emperor Frederick very much, and Bismarck assured her that there would be none: "Even if he thought it necessary," he said, "which he did not, he would not have the heart to propose it." At seven o'clock that evening, after a visit to the British Embassy, Queen Victoria saw Morell Mackenzie, who was not very encouraging about his patient. He said that he thought the fever, which was less though always increasing at night, would never leave the Emperor, and that he would not live above a few weeks, possibly two months, but hardly three. "We talked so long," wrote the Queen in her journal, "that I forgot the time, and had a terrible scramble to get ready for dinner."

The reason why Morell Mackenzie had begun to take a more pessimistic view of the Emperor was that ever since the 15th

April, a few days after the trouble with the tracheotomy tube, the Emperor had been feverish and had complained of pain in his neck; by 17th April an abscess had formed in front of the trachea in the region where the "false passage" had been made, and Mackenzie was afraid that this abscess would burrow downwards and lead to a septic infection of the lungs. On 18th April he telegraphed to Dr. Reid: "Prognosis very serious." He called in consultation Professor Senator and Professor Leyden, the leading Berlin physicians for pulmonary diseases, but neither could find evidence of any affection of the lungs, so that the continued rise of temperature—it went up on one or two occasions to 104° Fahrenheit—was attributable to the abscess, which, however, burst on 19th April and was draining so well from the tracheotomy wound that no further opening into it proved necessary. The tracheal cartilages continued slowly to break away, though without any extension of the growth from the larynx, and Mackenzie thought that a lighter tracheotomy tube would be helpful; accordingly he had one of aluminium specially made and this the patient wore with comfort until the end of his life. The Emperor was always very pleased when he could make himself understood to those about him by signs or whispered speech; he found writing everything down irksome, though writing materials were always laid beside him—he was accustomed to write in pencil on slips of paper about five inches long by three inches wide.

An intimate friend of Mackenzie's, F. C. Parkinson, has testified to his personal devotion to his task, and to its painfully arduous and exhausting character. If ever a man had nervous strain almost to breaking point plain upon his face, wrote Parkinson, it was Mackenzie when he visited him at Charlottenburg. His own asthmatic ailment compelled him to keep the temperature of his room abnormally high. The personal needs of the Emperor kept him perpetually on the move—the Emperor had only to touch a string and the ringing of a bell brought Mackenzie at once to his side. He was beset by journalists and enquiries of all kinds, from whose pertinacity he appeared to be insufficiently protected and, as a huge table piled up with unopened letters showed, his correspondence was of a magnitude impossible to grapple with. Never of robust appearance, he had grown much thinner and was haggard-looking to a degree, with

a troubled, hunted look, as if he never enjoyed a full night's rest. The strain and anxiety of the position appeared to be almost unbearable, and Parkinson tried to impress upon the Empress—who asked that he should be presented to her—that unless Mackenzie had rest, fresh air, recreation, and exercise regularly he would infallibly break down. Apparently the Empress paid heed to his friend's anxieties, for when Parkinson visited Mackenzie again, a week or two later, he was looking a little stronger and was in more equable spirits.

On 27th April Mackenzie was able to telegraph to Dr. Reid: "Emperor had good night. Temperature lower than it has been for a fortnight"; and on 29th April: "Emperor had good night and feels well this morning under circumstances." At the beginning of May a considerable improvement took place in the general condition of the Emperor—he regained strength and slept better, though the abscess in the neck still continued to discharge. On 5th May Mackenzie telegraphed to Dr. Reid: "Emperor had very good night and is gradually increasing in strength." It was arranged that Professor Bardeleben should take part in the medical consultations on Mondays, Wednesdays, and Fridays, and Professor Senator on Tuesdays, Thursdays, and Saturdays, Professor Leyden, who had special experience of problems of nutrition, being called into consultation when it was considered desirable; Morell Mackenzie remained in charge of the patient, assisted by Mark Hovell and Krause, the laryngologists, and Wegner, the Emperor's personal resident physician. Professor Virchow returned from Egypt early in May, had a consultation with Mackenzie, and made an examination of the discharge from the wound, with a negative result: he once more noted the absence of certain symptoms which he considered to be characteristic of cancer, particularly involvement of the lymphatic glands. A few days later the Emperor conferred on Professor Virchow the Order of the Red Eagle, of the second class. On 13th May Professor von Bergmann had the honour of dining with the Crown Prince William and the Crown Princess—a curious and significant fact, in view of recent events. A week or two previously, at Bismarck's seventy-third birthday dinner, the Crown Prince had delivered the principal speech, comparing Germany with a regiment of the field which had lost its commander and had seen its second-in-command severely

wounded. "The standard is borne," he cried, "by our illustrious Prince, our great Chancellor. Let him go on and we shall follow him!"

## V

On 16th May the Emperor was able to drive and walk in the park for several hours, the first time for a month, and he continued to do so daily while the weather was good. On 19th May Mackenzie telegraphed to Dr. Reid: "Emperor gaining strength daily. Was in park six hours yesterday"; and on 22nd May: "Emperor continues to gain strength daily: went for drive yesterday in Thiergarten and was received with extraordinary enthusiasm." The Emperor was anxious to be well enough to be present at the wedding of his second son, Prince Henry of Prussia—the sailor prince—with his cousin, Princess Irene of Hesse, which was arranged for 24th May. When a tailor came out to Charlottenburg to measure him for a new uniform for the wedding the Emperor told the man he ought not to look so glum, as he was not really so bad as the tailor seemed to imagine. The ceremony took place in the private chapel, a tiny edifice in rococo style capable of holding about forty persons, but by clearing out all the seats enough standing-room was made for the guests. The service opened with organ and choral preludes from Handel and Mendelssohn, and the congregation chanted a *Te Deum* preparatory to the sermon. Just before the Court chaplain began his address a side door opened and in walked the Emperor, dressed in the full dress uniform of a Prussian general, wearing the blue riband of the Garter and (in honour of the bride's family) the Star of his chief Hessian Order. With dignified grace he bowed to the congregation and took his seat beside the Empress, opposite the Grand Duke of Hesse and facing the bridal pair. As the bride and bridegroom exchanged rings two batteries of artillery in the park thundered joyful salutes. Benediction over, the wedding feast began, at which, however, the Emperor deputed the Crown Prince to propose the health of the young people.

For a few days after the wedding the Emperor showed signs of fatigue, but by 25th May had apparently "quite recovered from the effects" (according to Mackenzie's telegram). On 29th May

Mackenzie telegraphed to Dr. Reid: "Yesterday Emperor had best day since recent attack. I do not however consider that the old disease has materially improved, but Virchow takes a more favourable view." On the afternoon of 29th May the Emperor was aroused and stimulated by an incident which recalled to him the military triumphs of happier days. His reign had already been marked by a number of minor military reforms relating to the training and equipment of the army, notably the abolition of the cuirass as marching and fighting equipment in the ten cuirassier cavalry regiments—for Germany had clung to the cuirass longer than any other Continental State; he also introduced a new uniform for the German Navy. The Crown Prince William was in command of the First Brigade of Foot Guards and at the end of the spring manœuvres the final exercise was to be the storming of the Charlottenburg Bridge over the Berlin-to-Spandau canal. The Crown Prince wrote a note to his father suggesting that on the way home he might lead his troops through the park in front of the palace, so that the Emperor could take the salute, and received an answer of eager assent. During the march past the Emperor Frederick sat in his *victoria* in full uniform wearing his helmet for the first time since his accession, holding himself stiffly upright; and when the regiments had defiled past he handed the Crown Prince a slip of paper on which he had written: "Have been content and felt great joy."

Although the Emperor was tired after the excitement of reviewing his troops in the morning, towards six o'clock he was able to drive with the Empress in an open carriage into Berlin, through the Thiergarten. This was now looked upon by the Berliners as a fixed item in the daily programme and thousands of sightseers were accustomed to flock to the Charlottenburg *chaussée*—the military highway—to catch a glimpse of the Emperor passing amid a fluttering of handkerchiefs and waving of hats. On 1st June it had been arranged to move the Emperor and his household from Charlottenburg to his old summer home, the New Palace at Potsdam, now called Schloss Friedrichskron. The River Spree formed the boundary of one side of the park at Charlottenburg and it was possible to make the whole journey by water. Accordingly the Emperor drove through the park in his little pony-chaise to the bank of the

river and went on board his steam yacht *Alexandra*. Thousands of spectators had gathered on the opposite bank and received him with cheers, running along the bank as the royal party got under way. Spandau was gaily decorated, assembled school-children sang patriotic songs, and as the yacht passed under the bridge showers of flowers descended upon it, so that it took two of the sailors half an hour to gather them up. The voyage took two hours along the tortuous waterway of the Spree and the lakes along the course of the Havel, but it was pleasant and easy for the invalid, who arrived at Friedrichskron very little fatigued and drove afterwards in the park. Mackenzie telegraphed to Dr. Reid: "Emperor bore his journey here very well. His Majesty has not made progress last few days but is going on well."

## VI

For the next few days there was no change in the condition of the Emperor. On 4th June Mackenzie telegraphed to Dr. Reid: "Emperor had a good day yesterday. His Majesty walked and drove in his pony chaise." Professor Virchow, who had the opportunity on 29th May of examining his throat ("as far as was possible in its present state") declared in a report that the existence of a new malignant growth was unproved; the disease was up to the present localized; the discharge of pus had now ceased almost entirely. Mark Hovell had to leave for London on 4th June because of the death of his father, and Dr. Krause took his place on night duty. On 6th June a statement was published that the health of the Emperor continued to be so satisfactory that in future bulletins would be issued only at the discretion of the doctors, but on the morning of 8th June Krause reported to Morell Mackenzie (who telegraphed to Dr. Reid: "I do not think the Emperor so well to-day") that a much-dreaded laryngeal fistula had manifested itself: liquids were sometimes passing from the oesophagus (gullet) into the larynx, through an ulcerated opening caused by the growth. This was a most serious complication, and Mackenzie had to introduce a tampon-cannula to prevent the liquids trickling down into the trachea. Nevertheless the Emperor was able to conduct business that day, the most important item concerning the resignation of

## Herr von Puttkamer, the reactionary Prussian Minister of the Interior.

Puttkamer was, after Bismarck, the most important member of the Prussian cabinet, and his policies in regard to the elections, the Jewish problem, and the Socialist agitation were all in direct opposition to the attitude of the Emperor. He was asked to satisfy the Emperor that a new Bill under consideration for quinquennial (as against triennial) parliaments would not affect popular freedom of election, but he was unable to do so, and the Emperor forced his resignation, conferring on him, in recognition of past services, the Grand Cross of the Hohenzollern Order. The fall of Puttkamer was hailed as a great victory for the Liberals, and the Conservative newspapers made the occasion one for another violent attack on the Empress, who was accused of having intrigued for Puttkamer's dismissal "behind the back of Prince Bismarck". The ex-Kaiser William II in *My Early Life* states that from his knowledge of what was happening behind the scenes he was able to say that it was the Chancellor who, "in the hope of overcoming the opposition of which he complained on my mother's part and of gaining her favour", dropped Puttkamer, who was disagreeable to her. Whatever Bismarck's motive—and that attributed to him by William II hardly rings true—he was certainly not sorry to see Puttkamer go, for he was an awkward as well as a powerful colleague, although publicly Bismarck pretended the opposite and on the night that Puttkamer's resignation was gazetted he entertained the whole Prussian Cabinet to dinner in honour of the member they had lost.

A bulletin on 10th June sounded disquieting: "The Emperor has again been suffering from some slight difficulty in swallowing." Next day Mackenzie telegraphed Dr. Reid, for the information of Queen Victoria: "A fistulous communication has occurred between the larynx and oesophagus. I consider the condition extremely serious." On 12th June the bulletin, signed by Morell Mackenzie, Wegner, Krause, Mark Hovell (who had returned from London), Bardeleben, Leyden, and Senator, read as follows: "The difficulty experienced by His Majesty the Emperor-King in swallowing has increased to an extent that renders it difficult for him to take nourishment, and consequently His Majesty feels weaker than hitherto." Mackenzie

telegraphed Dr. Reid: "The Emperor is rapidly losing ground." The patient now had to be fed entirely by fluids through an œsophageal tube and was obviously in a critical condition, though fortunately he was suffering no pain. In the evening Mackenzie telegraphed: "Emperor continues to lose strength though he felt better this afternoon after I had fed him with a tube passed beyond the fistulous communication." On 13th June King Oscar of Sweden came to visit the invalid. Morell Mackenzie thought that the King had been put off because of the Emperor's condition, but when he found preparations being made to receive him, it was too late to intercept the carriages. The Emperor Frederick was rather breathless but received King Oscar sitting up, wearing an old fatigue-jacket, the buttons at the top unfastened, and then the King of Sweden interviewed Morell Mackenzie. In reply to a question about the Emperor's health Mackenzie said: "It is scarcely necessary to point out to you, sir, that the Emperor is in a most critical condition, from which I think it is almost impossible for him to rally; should he, however, get over this attack, his life might be spared for a few weeks." Next morning he telegraphed to Dr. Reid: "Emperor is sinking."

On 14th June a terminal broncho-pneumonia developed, the Emperor lay all day surrounded by members of his family, the Empress never left his bedside for more than a few minutes at a time, and Morell Mackenzie remained on duty continuously for nearly sixty hours. In the early morning of 15th June the Crown Prince William was called to his father's side, and the dying Emperor wrote, with a trembling hand: "Victoria, I and the children—" but never finished the sentence. Mackenzie telegraphed to Dr. Reid: "Emperor has had a quiet night but little sleep. He is gradually sinking;" and at half-past ten: "Emperor is unconscious." The end came peacefully at eleven o'clock on the morning of 15th June, when Morell Mackenzie with his gentle hand closed the quiet, kind, blue eyes.

## CHAPTER SEVEN

### *THE AFTERMATH*

#### I

TIRED from his long vigil Morell Mackenzie flung himself upon his bed and slept until he was awakened by an adjutant, who told him that the young Emperor and Prince Bismarck wished to see him. The Emperor received him courteously and Bismarck asked him to draw up a report on the case of the Emperor Frederick, which Mackenzie promised to do within the next few days, before he left Potsdam. Next day, however, an official from the Household Ministry called for the report, for which he said the Ministers were waiting. Mackenzie therefore wrote out at once the following statement: "Schloss Friedrichskron, June 16th, 1888. It is my opinion that the disease from which the Emperor Friedrich III died was cancer. The morbid process probably commenced in the deeper tissues and the cartilaginous structure of the larynx became affected at a very early date. A small growth which was present when I first examined the late Emperor was removed by me by several endolaryngeal operations, and though all the portions taken away were submitted to Professor Virchow, he was unable to detect in them any evidence of the existence of cancer. Examination of the sputa made at the beginning of March by Professor Waldeyer, however, led that pathologist to believe that cancer was then present. Whether the disease was originally cancerous or assumed a malignant character some months after its first appearance, it is impossible to state. The fact that perichondritis and caries of the cartilages played an active part in the development of the disease no doubt largely contributed to make it impossible to form a decided opinion as to its nature till quite recently." To this report Mark Hovell added a note: "In so far as my observations since last August permit me to form an opinion, I concur entirely with Sir Morell Mackenzie's views."

When Mackenzie found the official who was waiting for the report he was surprised to see him in conversation with Professor

von Bergmann. Half an hour later Dr. Wegner looked in upon Mackenzie in his sitting-room and said: "A *post-mortem* examination is going to be made. Do you care to come?" "Do I care to come?" answered Mackenzie; "how can you ask such a question?" He immediately called Mark Hovell and went with him to the room where the body of the dead Emperor lay. The Empress Frederick in her grief had begged that no *post-mortem* examination should be done, and in this she had been supported by her son, the Emperor William. But the Prussian law demanded that the cause of death must be established and strong representations were made to the Emperor, who then consented to the necropsy. It was said by Mackenzie that the representations were instigated by von Bergmann, who certainly told Felix Semon afterwards that if there were no *post-mortem* examination—to show that death had not been due to the alleged "false passage" and abscess which he was said to have caused—he was "a lost man" (*ein verlorener mann*).

The *post-mortem* examination was carried out by Professor Virchow, assisted by Professor Waldeyer, who prepared specimens for microscopic examination, and by Virchow's assistant, Dr. Langerhans, who took notes of the results of the examination. There were also present, in addition to Mackenzie and Hovell, Count Stolberg-Wernigerode, the Household Minister, Professor von Bergmann, Professor Bardeleben, Dr. Wegner and Dr. Bramann. Professors Leyden, Senator, and Krause—who had attended the Emperor with Mackenzie up to the day of his death—were not invited. The examination was somewhat hurried, for the lying-in-state had been arranged to begin within an hour, and Virchow stated afterwards that it was to be regretted that more care and time had not been given to the drawing up of the protocol on the *post-mortem* examination. The neck, larynx, and lungs alone were examined, and it was found that nearly the whole of the larynx (except the epiglottis) had been destroyed and it now consisted of one large flat gangrenous ulcer; patches of septic broncho-pneumonia were present in the lungs; no mention whatever was made of any abscess cavity. Professors Virchow and Waldeyer subsequently reported their microscopic findings. A nodule at the base of the epiglottis contained an alveolar structure with epidermoidal contents among which were "nest-cells". A lymphatic gland, removed from the left side

of the neck, showed the highest degree of change, the normal structure being "replaced by a loose alveolar tissue, the spaces of which are closely filled with epidermoidal cells having large nuclei". Some time afterwards Morell Mackenzie and Mark Hovell circulated a statement through a news agency—in reply to various newspaper reports—pointing out that the description of the tracheotomy wound and its surroundings in the *post-mortem* report was extremely obscure; the abscess had become diffused and the discharge of pus from it had ceased a few days before the death of the Emperor. Mark Hovell stated that he had personally on many occasions caused pus to flow out by the side of the tracheotomy cannula by passing his hands over the sides of the trachea at the lowest part of the neck and then drawing them upwards.

## II

A cordon of guards was drawn round the palace to prevent any documents being removed. The question was mooted of having the papers of Morell Mackenzie and Hovell examined, but the Minister of Justice told the Emperor (so Rennell Rodd said) that he had the power to do so, but not the right. The Household Minister ordered that no one in the Palace—specifically mentioning the doctors—should carry on any correspondence with outside, and if the doctors attempted to leave the Palace they were to be arrested. Detachments of soldiers with loaded rifles were posted on the terraces and at all the entrances of the park of Friedrichskron. Major von Natzmer, an aide-de-camp, sat ready mounted and, the moment the death of the Emperor was announced, galloped round the posts, inspecting guards and giving orders. No one was allowed to leave Friedrichskron without the permission of the new Emperor's aide-de-camp, and all telegrams had to have his visa. The Empress was refused an interview with Prince Bismarck for which she asked—word came back that he was fully occupied with affairs of State.

The funeral of the Emperor Frederick took place on 18th June, and was a private ceremony from which the public were excluded. Military bands were stationed at various points along the avenue leading from the Palace, muffled drums were rolled continuously, and one from another in succession the bands

took up a melancholy funeral march. Life Guards wearing black cuirasses led the small procession, followed by the Court clergy, royal pages, and the Ministers of State. Then came the hearse covered with wreaths, and behind it the royal mourners, diplomatic representatives and Court officials. Queen Victoria sent a telegram to the new Emperor: "I am broken-hearted. Help and do all you can for your poor dear mother and try to follow in your best, noblest and kindest of father's footsteps." The hope was vain. The first act of the Emperor was symbolic: he changed the name of the palace of Friedrichskron back to its old name of the New Palace. He issued an order to the Army and Navy, which ended with the following bombastic words: "Thus we belong to each other, I and the Army, we were born for each other and will cleave indissolubly to each other, whether it be the will of God to send us calm or storm. You will soon swear fealty and submission to me, and I promise ever to bear in mind that from the world above the eyes of my forefathers look down upon me, and that I shall have one day to stand accountable to them for the glory and honour of the Army." Three days later he issued a similar proclamation addressed to the People: "Summoned to the throne of my fathers, it is with eyes raised to the King of Kings that I assume the sceptre, and I vow before God to be to my people a just and merciful Prince, to do all things in piety and godly fear, to keep the peace, to promote the welfare of the country, to be a succourer of the poor and oppressed, a faithful guardian of the right. Upon this fealty I count, well knowing that with all my heart I shall requite it, as the loyal sovereign of a loyal people, both unwavering in devotion to their common Fatherland." The Emperor William afterwards pointed out, in his first volume of memoirs, that when he assumed the reins of government the entire generation of the Emperor Frederick was passed over, the generation of the grandson following upon the generation of the grandfather. The generation of the Emperor Frederick—imbued with many Liberal ideas and projects of reform which were to be carried out under the direction of the Emperor—found itself upon his death deceived in its hopes of exerting influence "and felt itself, to a certain extent, in the position of an orphan".

Bismarck was all-powerful again, and spared the Empress Frederick no humiliation—he did not even call upon her to offer

his condolences. Her brother, the Prince of Wales, came over from England to attend the funeral and met Bismarck's son, the Foreign Minister, Count Herbert Bismarck. The younger Bismarck wrote to Felix Semon that he told the Prince of Wales—who was fond of his brother-in-law—that the Emperor Frederick would have lived several years longer if he had never seen Mackenzie. "I gathered," he continued, "that H.R.H. did not like to hear this, the less as he had no reply to the arguments I based on the medical aspects of the case." He also had the effrontery to tell the Prince that an Emperor who could not talk was not fit to reign. The Prince of Wales told Prince Alexander von Hohenlohe that if he had not valued the good relations between England and Germany he would have thrown the Foreign Minister out of the room.

Count Herbert Bismarck had been carefully trained by his father to carry on the work and the traditions of the Bismarck autocracy as the power behind—or perhaps above—the throne. He modelled himself on his father, but, as Grant Robertson says, "imitated and exaggerated with repellent fidelity all the worst defects of his father's character—his brutality, coarseness, dictatorial insolence, and scrupulous disregard of the conventions of decent existence. His manners were insufferable and a byword." Felix Semon had been a school friend of this pinch-beck Bismarck, renewed contact with him when he was attached to the German Embassy in London in 1881, and had kept up the friendship. During the illness of the Emperor Frederick Semon provided him with medical views and opinions from England that contradicted those of Mackenzie, after the Emperor's death strongly urged upon him the necessity for a *post-mortem* examination, promised to get "the more salient points of the Report, published, with comments, in the English newspapers", and even advised Herbert Bismarck—who, after all, was Foreign Minister of the German Empire—to recommend von Bergmann, Gerhardt, Bardeleben, and Landgraf for decorations. Semon's part throughout the controversies was, he says in his autobiography, "played behind the scenes". No wonder, when he visited Germany in 1888, that von Bergmann and Gerhardt lauded Semon as their "staunchest and most valued ally"! It was all done "in the interests of honest specialism". Years later, a former patient of Semon's told Sir James Dundas-Grant, the

laryngologist, that what he most liked about Sir Felix Semon was his honesty. "Who told you about Semon's honesty?" asked Dundas-Grant. "As a matter of fact," answered the patient, "when I think of it, he told me himself."

## III

On 26th June the *Norddeutsche Kreuz-Zeitung*, the organ of the Chancellor, published a vitriolic attack upon Morell Mackenzie. Rennell Rodd was informed that the article was sent to the newspaper from the Foreign Office, and that the editorial staff hesitated to publish it but were instructed to do so immediately. It quoted first of all a statement in an anti-Bismarck Polish newspaper friendly to Mackenzie, the *Kuryer Warshawski*: "We are of opinion that Dr. Mackenzie as the most eminent authority on the larynx in Europe recognized the illness of the Emperor Frederick to be cancer just as early as Dr. Schrötter and the other doctors. He was, however, not only the doctor but the most confidential adviser of the Emperor and the Empress, and it was important not to declare the illness of the Crown Prince prematurely and so deprive him of the possibility of mounting the throne. The Emperor Frederick desired in his own interest and in that of his wife as well as for high moral and practical considerations to reign, if only for a brief period. It was thanks to Morell Mackenzie that this was accomplished." Well might Mackenzie pray to be saved from his friends, for this sort of editorial conjecture was multiplied in politically biased newspapers throughout Europe and swallowed as a statement of fact by historians of a later generation like Emil Ludwig. The *Norddeutsche Kreuz-Zeitung* commented that from the publication of this article it was to be assumed that "the Polish-Radical reporters, with whom the ostensible miracle doctor (*Heilkünstler*) Mackenzie, who now appears as a political agent, surrounded himself for his own advertising glorification in the Press, have now returned to their native country". The *Kreuz-Zeitung* went on to suggest that the Emperor Frederick, who had the highest possible conception of the obligations and the position of an Emperor, "had allowed no doubt to prevail that he would not assume the Government if it were placed beyond doubt that he was incurably affected by cancer"—a statement

which finds no corroboration in the recorded conversations of his patient with Mackenzie, in the letters of the Empress Frederick, or even in the memoirs of the Emperor William II, and is contradicted in the reminiscences of Prince Bismarck. The newspaper continued that to deceive the Emperor as to his real condition became an objective of those who for motives of their own sought to place the Emperor Frederick upon the throne "even in spite of actual incapacity to reign".

It was widely believed—and the belief has gained currency up to the present day—that there was a law of the Hohenzollern family, analogous to the Salic Law disallowing the accession to the throne of a female heir, which would effectively prevent an individual with an incurable disability from succeeding to the Prussian or German throne. To dispose of this idea it is only necessary to quote the words of Prince Bismarck in his *Reflections and Reminiscences*: "It is a fable that an heir to the throne who suffers from an incurable physical complaint is by the family laws of the Hohenzollern excluded from the succession. The family laws contain no provision on the matter, any more than does the text of the Prussian constitution."

The Emperor William in *My Early Years*, as has already been noted, apparently believed the accusation—made on such slender grounds—that Mackenzie deliberately diagnosed the laryngeal disease not to be cancer although he knew the contrary to be true. "The decisive proof is," he wrote, "that, on the journey back to England after the death of my father, he admitted that his only reason for not diagnosing the disease as cancer was that the poor Crown Prince should not be declared incapable of assuming the government!"

What is the authority for this "decisive proof"? A telegram from an unnamed newspaper correspondent in Holland who reported that Morell Mackenzie had made the incriminating statement to him on his way back to England from Charlottenburg. Mackenzie, in reply to an enquiry, wrote to the Berlin correspondent of the *Daily Telegraph* that the true facts were as follows: When he was at the Hague a Dutch newspaper reporter gained access to his room at his hotel and put two questions to him: "When did you admit the disease to be cancer?" To this Mackenzie replied: "We were all agreed about that in February." The interviewer then asked whether it was true that

the Emperor Frederick would never have ascended the throne if he had admitted the disease to be cancer. Mackenzie replied in three words: "I cannot tell."

Emil Ludwig, in his *Kaiser Wilhelm II*, made extensive use of the abusive article in the *Norddeutsche Kreuz-Zeitung* which, because it came from Bismarck, he accepts as authoritative. The newspaper article ended as follows: "Now that Dr. Mackenzie has left the German frontier behind him, it would appear to be his concern to save what he can of his medical reputation. He consequently abandons all the scruples which bound him in Germany, in order not to fall under the reproach of having been unworthy of confidence as a physician. As they say in England, he had the choice of being either a fool or a knave. According to his own admission, Mackenzie regarded it as his principal duty to play a political part, leaving entirely on one side the medical, for which perhaps he was conscious of his own incompetence."

The basis of the attack was political, and the newspaper opponents of Bismarck, such as the *Frankfurter Zeitung*—which had for many years the similar high standing in Germany that the *Manchester Guardian*, for example, has in England—did not fail to reply, so that the bitter controversy was opened again. The Empress Frederick was defamed as virulently as Mackenzie, and the pettiness and unscrupulousness of the Bismarcks, father and son, was shown at its worst in this libellous campaign. It is one of the serious criticisms of the character of the great Chancellor that his most brutal and relentless attacks upon the Empress Frederick—of which the scurrilous insinuations against the professional integrity of Mackenzie were only a part—were launched when he knew that she was helpless and unable to reply. She was *die Engländerin*—in Germany in the 'eighties a term of bitter contempt—who was fonder of politics, and Liberal politics at that, than of *Kinder, Kirche und Küche*, who had intrigued against the Fatherland, who had sacrificed the life of her husband to her ambitions to become an Empress, and who had preferred an incompetent English "quack" to the learned and scientific German professors. The Empress was distressed to learn, three weeks after the funeral, that an official report on her husband's illness was being drawn up, at the instance of Prince Bismarck, by Professors von Bergmann and Gerhardt with the aid of their chief associates in the case, ex-

cluding not only Morell Mackenzie but also Professor Virchow, who was a Liberal member of the Reichstag and a strong political opponent of Bismarck. The Empress begged to be spared the renewal of the public discussion of a subject so recent, so painful, and so intimate, but her wishes were disregarded at the Wilhelmstrasse.

## IV

Morell Mackenzie never lacked courage, but even he recoiled from the blast of the Bismarckian *Mackenzie-Hetze*. Every newspaper in Europe printed stories or speculations about him and ill-mannered strangers stopped him in the street to ask impertinent questions. With his daughter Ethel he fled for a too brief holiday to Venice, under the assumed name of John Morell, and once again enjoyed in her company picture galleries, churches, and peaceful days and nights. But he returned to London from Venice still worn and haggard. His alertness was gone, he moved stiffly and more deliberately, his speech was slower, and he was reticent about the ordeal at San Remo and Charlottenburg through which he had passed. Mackenzie's face suddenly and completely, said his friend Haweis, seemed to have lost its restless vivacity, and it looked thin and elongated. Although curiosity brought a sudden rush of patients on his return, the numbers quickly fell off again, and he began to worry about his practice, for his commitments were heavy and the mode of living of his family was no less expensive than before. The fee of £12,000, which he received for his thirteen months' attendance on the Emperor Frederick, in the words of Greville Macdonald "barely saved him from disaster". In his absence some of the laryngologists whom he had trained and had been his assistants absorbed a considerable proportion of his practice. Greville Macdonald—only a year previously house surgeon at the Throat Hospital, appointed by the influence of Mackenzie, who thus showed practical sympathy with Macdonald's handicap of deafness—had been left in charge of Mackenzie's private practice, receiving one-third of the total fees earned in his absence, a usual sort of arrangement. Macdonald naïvely wrote afterwards in his reminiscences: "On Sir Morell's return I found myself in a difficult position: for many

of his patients refused to return to him, seeing that I had, as they thought, treated them more expeditiously and not less successfully. Unfortunately, misinterpreting my independent success, and knowing nothing of the way I ignored his patients' appeals to me, he became less friendly, making it impossible for me to explain my rapid popularity, my brougham and pair, my tastefully furnished house in his own street." The explanation would, indeed, have proved somewhat difficult.

On 11th July there was issued from the Imperial Press at Berlin a black-bordered pamphlet sixty-two pages long, entitled *Die Krankheit Kaiser Friedrich des Dritten*, with the Imperial arms and an imposing list of authors upon its cover: Professor Bardeleben, Professor von Bergmann, Dr. Bramann, Professor Gerhardt, Professor Kussmaul, Dr. Landgraf, Dr. Moritz Schmidt, Professor von Schrötter, Professor Tobold, and Professor Waldeyer. In addition to Morell Mackenzie and Virchow, the names of Professor Krause, Professor Leyden, and Professor Senator were noticeably absent, although they had been more intimately concerned in the case than many of the others; Drs. Wegner and Schrader were probably omitted because of their Household appointments and lack of academic standing. It was understood—although not stated in the pamphlet—that the report was under the general editorship of Professor von Bergmann, and it was stated that it had been drawn from "official sources"—these sources being in fact documents and reports already drawn up by the various authors separately and deposited in the Prussian State Archives.

Instead of being, as was expected by the medical profession, a plain scientific statement of facts, the report turned out to be biased and polemical to a degree, vehemently attacking Morell Mackenzie, who was accused not only of entirely unwarranted optimism about his diagnosis and methods of treatment, and of raising false hopes that led to the postponement of an operation which would have cured the disease, but of actual malpraxis. Gerhardt boasted of the early diagnosis he had made—although it was more conjecture than diagnosis: "No statistics are adequate to measure the probability, in this individual case, of a permanently favourable issue. For in no other was the disease so early recognized—I might go so far as to say, while actually in germ." Bergmann—and likewise Tobold—played

down the seriousness of the operation: "The operation which we proposed was no more dangerous than that of inserting a tube, which in any event, if our diagnosis of cancer was correct, the Crown Prince would undoubtedly have had to undergo in course of time," and von Bergmann cited his seven successful cases of laryngo-fissure, avoiding any mention that in no case was the operation for cancer. Mackenzie was stated to have promised the Imperial family that he would speedily cure the disease in a few weeks without external operation, and, in reply to a question from the doctors whether he could state with certainty that the voice would be completely restored, said: "Yes, certainly," and added, after a pause, "humanly speaking." Mackenzie's opposition, it was pointed out, rendered all the preparations for operation useless, and he was alleged to have said that after a few weeks' treatment in England the Crown Prince would have his old voice again and would certainly be able to give commands at the autumn manœuvres.

Gerhardt added a more serious and malignant suggestion to his story of Mackenzie's "clumsiness" at the second examination of the Crown Prince in the following words: "Mackenzie tried to get another specimen. On the evening of 23rd May at Potsdam he again introduced strong, sharp forceps. I saw him take the forceps from his vest-pocket, introduce them without previous cleaning, and as he introduced them, the illuminating beam which he drew on the laryngeal mirror by means of a forehead mirror twisted to the side and fell on the patient's cheek instead of into his mouth. The forceps came out empty. I examined the patient immediately after him and found both vocal cords badly reddened, the right one bathed in blood over its whole length; on the edge of the right vocal cord, about the middle, a dark red clot projecting into the glottis. We [*i.e.* Gerhardt and Wegner] went to Mackenzie's room and told him decidedly that he had caught, damaged, and torn with the strong forceps the right, until then, healthy vocal cord instead of the left. He said: 'It can be,' and spoke of his immediate departure. We said that he must at least remain that night in Potsdam in case tracheotomy became necessary. This must be the first definitely proven case in which a throat specialist tried to tear away, by negligence, a piece of the healthy vocal cord of his patient." Whether Gerhardt meant by this that Mackenzie

deliberately, of malice aforethought, endeavoured to take away a piece of healthy tissue in order to mislead Virchow and get a favourable report from him—as was believed by many of the newspaper correspondents and other readers of the pamphlet, including Rennell Rodd and Mackenzie himself—is not quite certain, for the passage in the German text can be translated with the slightly milder meaning “a throat specialist trying to remove a portion injured by mistake the healthy vocal cord”. In any case the imputation was not only venomous but ludicrous and unbelievable in the case of a laryngologist with Morell Mackenzie’s manual dexterity and steadiness, for whatever divergent views might be held regarding the standards of his professional competence, even his bitterest enemies recognized his unrivalled manipulative skill, which was widely known and justly celebrated in two hemispheres. The minor but equally malevolent remarks about taking uncleansed forceps from a vest-pocket (Mackenzie used to carry his forceps in a silk bag lined with carbolized wool—in those days the last word in disinfection—and would not have omitted to do so in such an important case as this) and throwing the beam of light on the face instead of into the throat of the patient (the beam must pass across the face in transit before reaching the mouth) can be briefly dismissed as showing some lack of experience as well as gross prejudice on the part of Gerhardt.

Bergmann gave at considerable length in the report his version of the episode of the tracheotomy tube at Charlottenburg on 12th April, which was published in slightly less detail in the newspapers at the time and so has already been discussed; in relating his story he lost no opportunity of decrying the skill and impugning the credibility of Mackenzie. Bergmann complained of the scandalous injustices done him by the newspapers, which he assumed were inspired by Mackenzie—he said that Mackenzie was in the habit of receiving fourteen newspaper correspondents—and at the same time he denied any responsibility for the utterances of other newspapers on his own behalf, although he was known to be on friendly terms and in close touch with several correspondents and editors. He commended a letter by Henry Butlin in the *British Medical Journal*, because he called attention to some of the conditions which limited the value and trustworthiness of microscopic

examinations; and scorned remarks by Lennox Browne quoted in the *Pall Mall Gazette*, because he suggested that repeated cauterizations might turn an innocent into a cancerous growth. Both references were without doubt brought to his notice by Felix Semon. Bergmann also alleged that Mackenzie persuaded the Crown Prince to go to the Isle of Wight when he had expressly stated that climate had no influence on such ailments: "Mackenzie averred that the climate of the Isle of Wight would greatly benefit healing. All our words were in vain. The journey to England was decided, but how, Mackenzie alone of the doctors knew." The journey was, of course, because of Queen Victoria's Jubilee. Professor von Schrötter misrepresented Krause—a laryngologist already of international reputation, whom he described condescendingly as "an industrious young colleague" because he had once had him as a pupil—as well as Mackenzie, and managed to avoid the subject of total extirpation of the larynx on which he had given conflicting and equivocal opinions at San Remo. Moritz Schmidt, who at San Remo had suggested that the laryngeal disease looked syphilitic and pressed for anti-syphilitic remedies, made no mention of that subject, but said that "considering the gradual development of the disease since 10th March, the age of the patient and the laryngoscopic appearances, I could only regard the malady as one of perichondritis developed through cancer." Landgraf, Gerhardt's assistant, gave a report of his personal observations of the Crown Prince's larynx when he was in England, and thought it worth while to record that Mark Hovell had once had to ask him for information about the condition of the patient's larynx—Hovell having merely asked him out of politeness what he thought about it. The whole trend of the report was to show that the sagacious, experienced, and high-minded German professors had always been right and the ignorant, clumsy, and untrustworthy English doctors always wrong. It was gazetted in the *Reichs-Anzeiger* on 13th July that Professor von Bergmann had been awarded the Cross and Star of a Commander of the Hohenzollern Order and Professor Gerhardt the Order of the Red Eagle (second class) with oak leaves. Felix Semon did not receive his decoration for services rendered—the Order of the Red Eagle (third class)—until 1889.

The Empress Frederick described the report as wicked: it got on her nerves and she could not sleep. She told Rennell Rodd that people were beginning to ask why Mackenzie did not reply to the charges which it contained, and read him a letter from Mackenzie in which he undertook to be silent if she wished it, but at the same time pointed out that there were in the German report contentions injurious to his professional reputation if left unnoticed. Mackenzie said that he could "dispose of these allegations by an exact scientific exposition that would make the whole matter clear; but he would forgo making any defence if the Empress so desired". On 16th July *The Times* published the following statement from Mackenzie: "Sir Morell Mackenzie has been requested by Her Majesty the Empress Frederick to prepare for her a true history of the illness of the late Emperor Frederick III, for the purpose of correcting numerous inaccurate statements which have appeared in a recent official document issued by some of the German doctors who at various times were in attendance on His late Majesty. Whether, however, the Empress will permit the publication of the report is at present unknown. Sir Morell Mackenzie went down to Windsor on Saturday [14th July] and had the honour of being received by the Queen."

*The Fatal Illness of Frederick the Noble*, by Morell Mackenzie, a volume of 244 pages, with twenty-two illustrations, was published on 15th October. It has to be admitted that the book was injudicious. Mark Hovell said afterwards that he personally cut out large portions before its publication and James Donelan that he tried to dissuade Mackenzie from publishing it. When the book was about to be published Mackenzie himself had some doubts and before the final revise went to the printers he sent for Donelan—who was then his private assistant—and asked him to say straight out what he thought about it. Donelan said to him: "You have had the satisfaction of writing it, such as it is. It will do you no good, for you are only playing into the hands of your enemies. Put it up on the Horatian principle for ten years and in the meantime write a sober article in the professional journals or, if you like, since you have been publicly attacked, in the lay press." Mackenzie replied: "I

believe you are right." He held back the revise for a few days more, but other counsels prevailed, among them—says Donelan—those of the Empress Frederick, and the book appeared. It is in fact unlikely that the Empress Frederick was one of those who prevailed upon Mackenzie to publish. Rennell Rodd, who saw her a great deal at this time—he was writing, at her invitation, his short biography of the Emperor Frederick—says that she was persuaded "by one or two individuals of little judgment" that refutation ought to be authorized. In April, when Mackenzie and Mark Hovell wrote a brief letter to *The Times* protesting against certain false statements, involving Hovell in particular, they had first of all prepared an article for publication which was submitted to the Empress. She sensibly commented on it: "This is all right and puts it all straight, only one must take care that it does not look as though you used the press to defend yourself, or it might degenerate into a duel between Bergmann and yourself in the press about your patient . . . It is not thought etiquette here that the medical men should communicate themselves to the public any news which they had to give, without being authorized on each special occasion. Bergmann, Gerhardt, and Schmidt have broken through this etiquette, but would not own up to it, and I do not like the official world here to reproach you with doing what others are not allowed to do. . . . Pray excuse my saying this, perhaps my fears are groundless, only I wish to smooth the plumage of popular opinion which has been artificially ruffled." If this was the point of view in April of the Empress Frederick, it is hardly likely to have altered in October—there is nothing about the book in her letters at that time—and Mackenzie must accept full responsibility for the publication of *Frederick the Noble*, which, indeed, he was more than ready to do. In his preface Mackenzie said: "I take this opportunity of saying that I have advanced nothing here with respect to my hostile colleagues which has not been publicly stated already, nor have I made any allegations except in self-defence in reply to charges against myself. I regret extremely that the controversy should have assumed such a tone, but I may remind my readers that I am in no way responsible for it." Mackenzie used every weapon—the blunderbuss and the bludgeon as well as the rapier—in his defence, and the terms in which he referred to some of the

leading physicians and surgeons in Germany shocked his readers, most of whom were ignorant of the vilification and vituperation that had already been heaped upon him by those same physicians and surgeons.

First of all, under the heading of "Gerhardt's False Accusation", Mackenzie scornfully repudiated the suggestion that he had injured the larynx on 23rd May. "Professor Gerhardt states," he said, "that on his mentioning the matter to me, I expressed myself in the following remarkable terms: *'It can be.'* I do not pretend to know what these words may mean, but English readers will have no difficulty in believing that I never could have used them. The matter is trivial in itself, but affords a useful gauge of my accuser's accuracy in more serious things." Again: "There can be no difficulty in understanding Professor Gerhardt's motive in the affair. My success on the first occasion had mortified him, and he was glad of an opportunity to find fault." Under the heading of "More Gerhardtian Amenities", Mackenzie continued: "I have already mentioned my experience of Professor Gerhardt as a 'candid friend'; I had now to learn his powers as an unscrupulous foe. Before I left Potsdam the Crown Princess told me that Professor Gerhardt had said to her that even if I did succeed in cutting away the growth with forceps, the healing or cicatrization of the wound itself would so interfere with the working of the vocal cord that, as far as the voice was concerned, the last state of the illustrious patient would be worse than the first. The Professor also gave her to understand that the right vocal cord was in a festering condition owing to the injury I had caused. I assured the Princess that these alarming statements were absolutely unfounded . . . After this illustration of Professor Gerhardt's peculiar notions of professional ethics, I was compelled to inform the Crown Princess that I must in future decline to meet him again in consultation, though I had no wish to interfere with his examining the Crown Prince's throat as often as His Imperial Highness might desire." Later Mackenzie said: "There is no record in medical literature, so far as I am aware, in which the cautery, a most valuable agent if properly handled, was so terribly misused . . . Whether Gerhardt's ruthless cauterization actually caused the development of the cancer or not, there can be little doubt that he is largely responsible for the perichondritis which played so im-

portant a part in this sad case . . . If the growth was benign in the first instance, there is, in my opinion, only too much reason to think that Gerhardt's burnings must be held answerable for its subsequent transformation into cancer: if it was malignant from the first, the disease was undoubtedly aggravated by the treatment." Again: "In showing that the German doctors are equally answerable with me, I am not trying to remove any part of the responsibility from my own shoulders; I only wish to show the shifty character of the men with whom I had to deal." "In dealing with Professor Gerhardt's report," said Mackenzie, farther on, "what must strike every impartial reader is that he thought much more of protecting his own professional reputation than of benefiting the Crown Prince. As he could not himself extract a piece of the growth for microscopic examination he should have at once called in someone who could do so . . . [but he] invoked the aid of a general surgeon who could not be his rival in the laryngological field . . . In this way Gerhardt hoped to hide his own incompetence." With regard to a reference by von Bergmann about the supposed mystery underlying the fact that Gerhardt did not come to England in the Crown Prince's suite, Mackenzie says: "I cannot profess to be able to dissipate the Cimmerian darkness in which this important matter is involved, but it strikes me as just within the bounds of possibility that the Crown Prince may not have cared to be accompanied by a man who had shown himself incompetent, indiscreet, and obstructive."

Thus did Mackenzie deal with the Professor of Clinical Medicine at the University of Berlin; he showed equally scant respect for the Professor of Surgery. His first mention of Professor von Bergmann was distinctly unkind: "Professor von Bergmann I had heard of in connection with the Servian and Russo-Turkish wars, and I knew that he had been called from St. Petersburg to take the Chair of Surgery at Berlin after it had been declined by Professor Billroth, of Vienna, and Professor Volkmann, of Halle, to whom it had previously been offered. I had never, however, seen him mentioned in laryngological literature, save as a somewhat unfortunate operator in a few cases of extirpation of the larynx." Bergmann became more intimately concerned with the case after tracheotomy had been performed and sent messages to Mackenzie through Dr. Schrader

about the necessity for antisepsis in cleansing the cannula. "It appeared to me," said Mackenzie, "that the Professor of Surgery, in the matter of antisepticism, attended to the letter rather than the spirit, and whilst insisting in minute observances connected with the instruments—observances which had been discarded by the inventor of the system himself—he did not always perhaps pay sufficient regard to personal cleanliness." The chief criticism of von Bergmann was, however, with reference to the incident of the tracheotomy tube at Charlottenburg on 12th April, of which Bergmann gave an account that completely and vindictively contradicted Mackenzie's. "In sending off the message [to von Bergmann]," said Mackenzie, "little did I think that it would have such fatal consequences. It is no exaggeration to say that these hastily scribbled lines proved to be the death-warrant of the Emperor . . . Bergmann's roughness was never forgotten by the Emperor, although the nobility of his nature prevented him from showing any resentment, and even from bearing that awkward operator any ill-will . . . The ordinary cannula as used by von Bergmann was, in point of fact, a circular knife. It is easy to realize what a dangerous weapon this must be in the hands of a clumsy or excited surgeon . . . The vegetations round the tracheal orifice which, at the suggestion of Professor Bardeleben, had been treated with bismuth, had completely disappeared—a proof that they were not cancerous growths as had been positively stated by von Bergmann." Later on: "In looking back at this sad case, there are one or two matters which will always be a source of deep satisfaction to me; one is that through the mild and painless operations performed by myself the dangerous methods recommended by Gerhardt and von Bergmann were prevented, and that I thereby not only prolonged the life of the Emperor, but also saved him much suffering. The other point which affords me some consolation is that I was able to prevent His Majesty suffering any actual pain during the long course of his distressing complaint . . . Except at the moment when von Bergmann made the 'false passage' and forced his finger into the wound, I do not think he ever had a moment of severe pain." Mackenzie spoke of another statement of von Bergmann as being "in the highest degree misleading" and referred to "Professor von Bergmann's reckless method of making statements which have but slight foundation

in fact." "When von Bergmann referred to himself as the operator the growth was described as 'limited to the vocal cord' (page 10 of the German report); when Mackenzie figured as the operator and von Bergmann wished to show that it was impossible for him to remove the growth through the mouth, the growth 'affected the underside of the vocal cord and probably the side wall of the lower larynx' (page 23 of the German report)." Again: "If when the time came for tracheotomy to be performed the after-treatment of that operation had been carried out in an intelligent manner not only would the illustrious patient have been spared much unnecessary suffering, but his life would in all human probability have been prolonged considerably beyond what actually was the case . . . several months of his existence were sacrificed through unskilful treatment and the use of clumsy instruments." Later: "It now also appears that Bergmann has had one successful case of excision of the larynx in a patient suffering from cancer. His statement that while I was in Berlin he offered to show me this patient has no more foundation than many others of his so-called facts. I never heard of the case till I read of it in the German pamphlet. Had I had the opportunity of seeing a patient cured by the Professor, I should have examined him with the greatest interest and curiosity." Finally: "Dr. von Bergmann says, 'We could never understand the position of a doctor whose treatment could only be based on the section of an anatomist (microscopist), a position which carried out to its full consequences places the physician behind the *post-mortem* table!' In other words, von Bergmann insinuates that because I ask for a piece of the structure of a doubtful tumour to be examined with the microscope during life, I am placing myself behind the *post-mortem* table, which means, if it means anything at all, that I am waiting for the death of the patient in order to discover the nature of his disease. Bergmann's logic appears to be quite as eccentric as his mode of handling tracheotomy tubes."

Mackenzie was perhaps unnecessarily contemptuous in his references to Dr. Landgraf, even though the young man did make himself sound rather self-satisfied in his reports: "Dr. Landgraf may by this time be an excellent laryngologist, but it is quite certain that when he was 'controlling' me in the summer of 1887 he had not learned the rudiments of the art . . . It would indeed

be matter for surprise if anyone who had ever seen Dr. Landgraf use the laryngoscope should ask him for information." Mackenzie spoke of "Professor von Schrötter's somewhat offensive airs of patronage" and his reference to Hovell's "almost blasphemous presumption" in expressing the opinion ultimately arrived at by von Schrötter himself. Of Dr. Moritz Schmidt he observed: "As if, however, to prove that he knew nothing whatever about cancer of the larynx Dr. Schmidt has gone out of his way to say that 'the course of the disease from the beginning to the end appears to have been a usual and typical one'. Now everyone knows that the disease ran a most exceptional course." The reports of Professor Kussmaul, Professor Waldeyer, and Professor Bardeleben were dismissed by Mackenzie in a word as containing no controversial matter; regarding Dr. Bramann, whose report was incorporated with von Bergmann's, he said: "The principal object of his letters appears to be to set himself right with Professor von Bergmann, and to show that he was obliged to operate [at San Remo] before he arrived."

## VI

A day or two before the publication of *Frederick the Noble* there appeared in Berlin a complete English translation of the German report, with the Imperial arms on the cover, entitled: *The Illness of the Emperor Frederick III: an authentic record, derived from official sources, and founded upon the reports deposited in the archives of the Royal House of Prussia*. On 15th October Messrs. Lewis & Lewis, Mackenzie's solicitors, sent the following telegram round to all the foreign publishing firms in London: "If translation of German pamphlet is published by you we have instructions from Sir Morell Mackenzie to commence an action for libel against you and claim heavy damages." The few copies that had already been received in London from Berlin were in consequence withdrawn from circulation. On the same day a German translation of Morell Mackenzie's *Frederick the Noble* was published; no fewer than thirty-four German publishers had negotiated for the publishing rights; it was eventually published by Herr Spaarmann of Duisburg, and a first printing of 100,000 copies was distributed throughout the German Empire. On the day of publication

the German police, however, confiscated every copy of the book; the publisher was not adversely affected, for he had made it a condition that all orders by booksellers must be accompanied by payments in cash. A few weeks later the judicial embargo on the book in Germany was raised—it was said at the instance of the Emperor William himself, who was abroad when it first appeared.

Meanwhile in England *Frederick the Noble* created a sensation: 100,000 copies were sold in a fortnight and an American edition and a French translation were published simultaneously. The book was received with a storm of unfavourable criticism on all sides and in particular from the medical profession: Morell Mackenzie was said "to have violated the secrets of the sick-room," and the washing in public of dirty linen by leading English and German doctors, the mutual bandying of charges of incompetency, the violent expressions of mutual distrust, were regretted everywhere. The general conclusion was that neither side established the charges against the other; most of the critics considered that Gerhardt's assertion that Mackenzie had wounded the healthy right vocal cord was highly improbable; but, curiously enough, most of them were on the contrary inclined to accept von Bergmann's account of the incident of the tracheotomy tube rather than Mackenzie's, doubtless because of Bergmann's high reputation in the surgical world. The tone of Mackenzie's book was deplored and his more than plain speaking about the conduct of his German colleagues was deemed highly unprofessional and unethical—but it must be admitted that few of the critics who condemned Mackenzie's language had read the equally violent attacks upon him in the German pamphlet. The *British Medical Journal* and *The Lancet* published long leading articles on the book, it was discussed in almost every review and every newspaper in Europe and America—*The Times* published an impartial review of book and pamphlet, considered together, extending to six columns. Every journal contrasted the discreditable political passions and the humiliating medical disputes with the noble figure of the Emperor bearing a terrible affliction with heroic fortitude.

One justifiable criticism concerned the statistics of operations for cancer of the larynx which were quoted extensively in the

book. It was pointed out that in a long list of cases nearly a score were mentioned twice—all German and all fatal within a very short time of the operation. It was suggested that Mackenzie had done this of malice aforethought and that none of his figures was therefore to be trusted. In a presidential address at the Section of Laryngology of the Royal Society of Medicine, thirty years later, James Donelan explained this unfortunate error. The statistics were decided on by Mackenzie within a week of publication and Donelan was entrusted with their compilation. He was not aware then of the German method of multiplying the output of medical literature, whereby a surgeon and his assistant write separate articles on the same case in different periodicals; as ill-luck had it, he did not happen to come across a single pair of these identical cases at the same time, and he was not studying them, only looking for the surgeon's name, age of patient, and result of operation. Donelan offered to write an explanation in the professional press, but Mackenzie forbade him, saying that his enemies would only say that he had deliberately availed himself of Donelan's inexperience to falsify the statistics.

Morell Mackenzie found his most severe critics among the hierarchy of his own profession, in the Royal College of Physicians and the Royal College of Surgeons, among whom he had not been *persona grata* for long before the publication of *Frederick the Noble* or the illness of the Crown Prince. In the *Fortnightly Review* he had written in August, 1885: "I should be the last person to say a word against the Royal College of Physicians. It has a library kept almost as jealously closed against intruders as a seraglio; it does its work as a second-rate licensing board with fair efficiency; and it discharges the delicate duties of a Mrs. Grundy to the higher ranks of the profession with a 'leniency' of which Dr. Donkin speaks with an unction almost suggestive of personal gratitude. But is it intended to imply that human passions and weaknesses have no part in the dignified conclaves of the Areopagus of Pall Mall East? Surely one has heard of favouritism and caprice in the election of Fellows? of jealousy and malice in the exclusion of men too eminent for that level of decorous mediocrity which is the characteristic feature of this as of more famous academies? To say this much is, after all, only to assert that the College of

Physicians is an assembly made up of merely human units." In 1889, in an article in the *Contemporary Review*, Mackenzie discussed the reform of the Royal College of Surgeons with comparable asperity: "Visitors to that legal 'Grove of Academe', Lincoln's Inn Fields, can hardly fail to have observed a large building with a sort of shabby-genteel pretension to architectural style which stands on the south side of the square . . . Now, how has the College fulfilled its mission? It has assuredly not promoted the study of surgery as it might have done by the teaching given within its walls, nor has it sufficiently encouraged students to resort either to its library or to its museum for purposes of self-instruction."

Contrary to a general belief, Morell Mackenzie's case was never formally discussed at any meeting of the Royal College of Physicians. Friends warned him that a hostile vote would be brought forward at an early date, and the Registrar of the College, a personal friend, wrote to Mackenzie asking whether he had been correctly informed that he had resigned his Membership. Taking the hint, in a letter addressed to the Registrar on 23rd November, Mackenzie resigned his diploma of Member of the College, stating that he had only taken it in order to become eligible for the honorary staff of the London Hospital many years previously.

The Council of the Royal College of Surgeons discussed Mackenzie and his book at a meeting on 10th January, 1889, and the following is an extract of the Minutes of that date: "The Secretary reported that in accordance with the instructions of the Council, he had written to Sir Morell Mackenzie on the 21st. ultimo, forwarding to him a copy of the following motion, notice of which had been given for this meeting of the Council, offering him the opportunity of making any remarks thereon which he might desire: 'The attention of the Council of the Royal College of Surgeons of England has been called to a volume published by Sir Morell Mackenzie, which bears the title, *The Fatal Illness of Frederick the Noble*, and the Council consider it to be their duty to express their deep regret that any Member of the College should have allowed himself to publish, in such a manner, the charges that are therein made against distinguished surgeons who were his colleagues in the case. The Council have not sufficient means of forming a conclusive judg-

ment on the facts which are in dispute, but in their opinion no provocation, such as Sir Morell Mackenzie alleges, can justify the publication, or the language employed in it.' Read a letter of the 22nd ultimo from Sir Morell Mackenzie, acknowledging the receipt of the Secretary's letter. Read a further letter of the 8th instant, and also a letter of the same date addressed to the President, from Sir Morell Mackenzie, showing cause why the resolution should not be passed. The Senior Vice-President, in pursuance of his notice on the 13th of December last, thereupon moved the adoption of the resolution in question. And the Motion having been seconded by the Junior Vice-President, and the votes of the Council taken thereon, the Motion was carried, twenty-one Members voting for and two against the same, one Member having abstained from voting. Resolved: 'That Sir Morell Mackenzie be informed that his letters, including that addressed to the President, have been read to the Council, and that a copy of the foregoing resolution of the Council be forwarded to him.'"

The leaders of the British Medical Association took particular exception to the publication in the *British Medical Journal* on 13th October, 1888, of facsimiles of two of the last scripts which the Emperor Frederick wrote, the more important being the words: "The same Hovell just tried before Bergmann ill-treated me," which obviously cast reflections on Professor von Bergmann (see page 123). Mackenzie had apparently intended to publish this facsimile in *Frederick the Noble* but had been dissuaded, and the editor of the *Journal*, Ernest Hart—a brilliant and odd character who likewise had enemies in his own profession—had got hold of the script, probably through Charles Louis Taylor, a member of his staff, who had formerly been secretary to Morell Mackenzie. A memorial was drawn up, signed by 186 prominent consultants who were members of the Association, and presented to the Council, drawing attention to the publication, which the signatories regarded as a violation of professional confidence, and its appearance in the *British Medical Journal* as discreditable to the medical profession in this country. The Council passed a resolution expressing its regret that "under any circumstances" the document had been published, and a copy of this resolution was sent to Professor von Bergmann by the President of the Association in January, 1889.

James McNeill Whistler, the painter, who was a friend of Mackenzie's, sent him a copy of his book, *The Gentle Art of Making Enemies*, when it was published in 1890. Mackenzie opened it, glanced through it, and handed the book to James Donelan, who was with him at the time. "Take it," he said, "I do not seem to have any need to study it."

## VII

Morell Mackenzie had, however, enthusiastic supporters as well as harsh critics, and urged by some of his devoted colleagues he founded in November, 1888, the first British society devoted to laryngology, the British Rhino-Laryngological Association. Mackenzie gave a presidential address on "The Progress of Laryngology" at the first meeting of the society on 14th November, 1888, and it quickly gained a large membership, especially among the younger and the provincial laryngologists, for many of the London throat specialists held aloof. It is curious that no laryngological society had been founded in England until this date, for the New York Laryngological Society had begun its distinguished career so long before as 1873, when it was founded by Clinton Wagner, who had been for a time a pupil of Mackenzie's at the Throat Hospital, Golden Square. In 1881 at the International Medical Congress in London laryngology had been allotted a sub-section, and this became a full section at the International Medical Congress in Copenhagen in 1884. The British Medical Association at its Annual Meeting in 1887 for the first time admitted a separate sub-section of laryngology, and in 1888 granted laryngology the dignity of a full section. The British Rhino-Laryngological Association continued to flourish until 1907, when it amalgamated with the London Laryngological Society (founded in 1893 by Felix Semon) to become the Section of Laryngology of the Royal Society of Medicine.

Mackenzie was greatly cheered and stimulated by being invited to lecture at Edinburgh in December, 1888, under the auspices of the Philosophical Institution, and when the medical students of the University heard that he was coming north, they invited him to give at the same time the first of a series of lectures arranged by the Students' Representative Council with

the object of raising funds for the Students' Union, then approaching completion. Mackenzie gave his first lecture on 4th December at the Music Hall, which was crowded in every part, on "Speech and Song". Mr. J. R. Findlay, the proprietor of *The Scotsman*, which had always taken Mackenzie's side, was in the chair and, while Professors Masson (of Rhetoric and English Literature) and Wallace (of Agriculture) and a number of leading Scottish legal lights were present with him on the platform, the medical faculty—which normally takes a prominent part in the activities of Edinburgh—was conspicuously absent, a fact which was pointedly commented upon in a leading article in *The Scotsman* next day. On the mornings of 5th and 6th December there was uproar in the medical classrooms of Edinburgh University, when the students shuffled their feet and shouted down their lecturers, to show their high-spirited disapproval of the boycott of Mackenzie. On the evening of the 6th December he had an enthusiastic reception at the Synod Hall from a crowded audience, mainly of students. Professor Campbell Fraser, the philosopher, presided, and accompanying him on the platform were Professor Blackie, the popular and eccentric professor of Greek, the youthful Dr. R. C. Buist, founder of the university weekly, *The Student*, and the young advocate Fitzroy Bell, originator of the Students' Representative Council. Morell Mackenzie took as his subject "Culture and Professional Success"—the relation of general culture to professional skill.

The subject was one which appealed to him—a man of highly cultivated literary and artistic tastes, who had never known the amenities of an old public school or an ancient university, but, although brought up in a cultured home, had had to go into an insurance office at the age of sixteen to help to keep his family, until a kindly relative rescued him and sent him into the strictly utilitarian atmosphere of the medical school of the London Hospital in the Whitechapel Road. He proceeded to define what culture meant, quoted Matthew Arnold, noted Huxley's objection that Matthew Arnold did not take account of science as a branch of culture—but Huxley admitted that the study of science was apt to give a twist ("Hear, hear!" from Professor Blackie) and it was the object of culture to avoid twists. Culture was a condition of intellect: it implied flexibility

of mind, general development of all the faculties. The cultured man was not necessarily a giant in any one department, but his culture made him a complete man and fit to receive knowledge. The classical languages and mathematics were, however, among all, the best methods. The professional man required not merely technical knowledge, but the ability to read human nature so as to influence others for good; and culture gave one that power, along with intellectual and social grace. He told the students that, while the individual study of books might do much, they must, if they would aim at the highest type of culture, avail themselves to the uttermost of opportunities of intellectual communion which only a university could supply.

Professor Blackie moved a vote of thanks, riding his own hobby-horse amid cat-calls: "Greek as taught in Scotland," he said, "is not worth a rap. If you could sit down and take a cup of tea with Plato that would be of some use, but drill in Greek grammar is no use at all." The President of the Students' Representative Council seconded the vote of thanks and presented Morell Mackenzie with an address, in which the Edinburgh students recorded their "sense of his distinguished career as a professional man and thanked him for inaugurating the course of lectures". Mackenzie enjoyed his cordial reception in Edinburgh, where the students had to be dissuaded from taking the horses from his carriage to draw it home themselves, where he met everyone of note except the medical professors and the surgeons of the Royal Infirmary, gave a clinical lecture at the little Eye, Ear and Throat Infirmary in Cambridge Street, visited the nearly completed Forth Bridge, and bought himself a new American invention, the safety razor, in Princes Street.

In March, 1890, Mackenzie brought an action in the Queen's Bench Division of the High Court against the proprietor of the *St. James's Gazette*, Mr. Steinkopff, a naturalized German, on account of two libellous letters which he had sent to Mr. Frederick Greenwood, formerly editor of the newspaper; at the same time he brought another action against *The Times*, which had published the libellous letters, apparently through the inadvertence of a reporter, on 23rd, May, 1888. Steinkopff wrote from Berlin a month before the death of the Emperor Frederick, the first letter containing the following passage: "The Emperor is not expected to live much longer, and when

he dies a storm will break out against Mackenzie, not on account of the final collapse, but because of the many mistakes he is said to have made." In the second letter Steinkopff said: "I am told again, and from a totally different quarter that Mackenzie will have to run the moment the Emperor dies. There is so much material being collected against him that he will find it difficult to stand. He is charged with conspiracy, in so far that he, knowing the Emperor suffered from cancer, denied it, in order that the Emperor might not be excluded from the succession, which certainly would have been done in accordance with the laws of the Hohenzollerns had Mackenzie admitted the existence of cancer. He so conspired to provide funds for various present and prospective purposes, it is said."

The letters were private, addressed to Greenwood just before the transfer of the newspaper to Steinkopff, and would not have been made public but for an accident: Frederick Greenwood brought an action for wrongful dismissal against the previous proprietor, and the letters were read in court to show that it was intended that Greenwood should continue under Steinkopff. It was agreed between counsel that the passages relating to Morell Mackenzie should not be read, but somehow or other the reporter of *The Times* included them in his report of the case, apparently inadvertently but certainly carelessly.

Steinkopff did not attempt to defend his statements, made a formal but half-hearted apology, and contemptuously offered forty shillings damages. Morell Mackenzie's counsel were Sir Charles Russell (afterwards Lord Russell of Killowen, Lord Chief Justice) and Mr. Asquith (afterwards the Liberal Prime Minister), with Mr. Finlay (afterwards Lord Chancellor) on the other side, and he made a long statement in court detailing the course of events from the beginning of the Emperor Frederick's illness. He stated on oath in the witness-box: "There is no truth in the statements in the letters. There is no truth in the statement that I, knowing it to be cancer, denied it. Nor is it true that I conspired with anyone that the Emperor might not be excluded from the succession. I knew nothing as to any law which could exclude him; on the contrary, the cancer being discovered and reported on March 4th, he succeeded on the 12th. It is not true that I had to 'run', on the death of the Emperor; on the contrary, I was very respectfully treated by

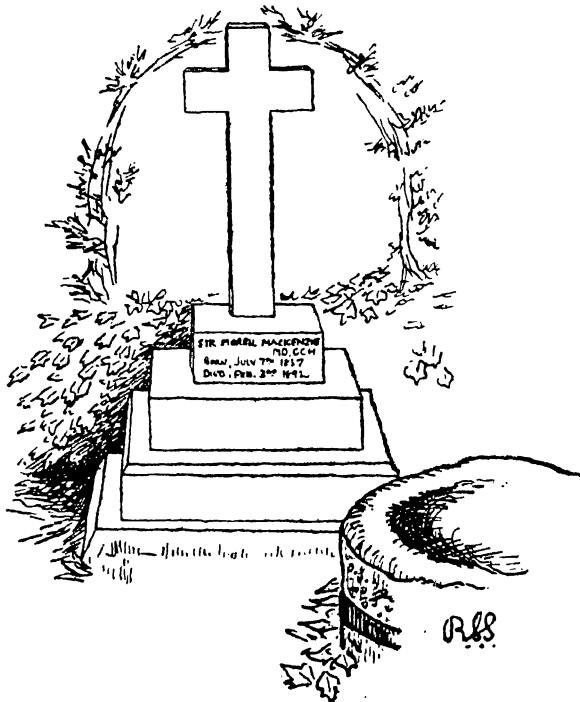
the public at Berlin; nor did any 'storm' break out upon me." In cross-examination he admitted that reports had circulated in Germany against him of an unfavourable nature, but in the anti-English Press, and they formed, he supposed, the subject of conversation in Germany. The jury awarded Mackenzie damages to the amount of £1,500, with costs, against Steinkopff, and an additional £150, with costs, against *The Times*.

## VIII

Between 1888 and 1892 Mackenzie fell an easy prey to various illnesses and his old enemy, asthma, began to trouble him continuously, relieved only by the constant smoking of stramonium cigarettes. His former exuberant energy had disappeared, although now and then a flicker of his old bright self would reappear after a timely holiday abroad—he went to Teneriffe in 1889 with his son Harry and his daughters Ethel and Hilda; for a cruise in the Mediterranean and the Black Sea, as far as Athens, Constantinople, and the Crimea, in 1890; and to Bellagio on Lake Como with his daughter Ethel in the autumn of 1891. He had a first severe attack of influenza in 1890 and another in November, 1891; in ten days he was out again amid the November fogs, but had a relapse at the end of the month. He rallied quickly, however, with an astonishing display of nervous energy, and attended the Prince of Wales half a dozen times at Marlborough House before the end of 1891, receiving from him a New Year's Eve gift in the form of a jewelled breast-pin.

Morell Mackenzie began his last published essay with the words: "In the middle of August last year [1890], after an exceptionally fatiguing season, I was still busy in my consulting-room, though sighing for release, and half-inclined to say to my servant, 'Tie up the knocker, say I'm sick, I'm dead'." His asthma became worse, his sleep was always broken, he passed his nights dozing in a sitting posture. On 19th January, 1892, he caught influenza again. He was urged by his brother, Dr. Stephen Mackenzie, to get out of London, but he answered: "If I am going to get well, I shall get well anyhow; and if I am not to get well, I may as well stop where I am." His wife insisted on trying to nurse him herself, and Mackenzie said to his

daughters: "I don't want your mother to do all—but I don't want her to go out of the room much." Pneumonia is said to have developed as a complication of the influenza, and his wife and daughters hardly left his side. On the evening of 3rd February he was restless, kept smoking his stramonium cigarettes, and could not settle to sleep. His wife became suddenly alarmed at the appearance of his face and asked: "Shall I send for Stephen?" For his younger brother—afterwards Sir Stephen Mackenzie, the distinguished dermatologist who introduced the Finsen light



Morell Mackenzie's grave, Wargrave.

into England—lived only a few doors away at 18 Cavendish Square. "Yes," answered Mackenzie faintly, "send for Stephen"—and never spoke again. Haweis, Mackenzie's biographer, says that "neither brandy nor artificial respiration were of any avail"—unlikely treatment for pneumonia. The present writer was told by a friend of Mackenzie's that he was given laudanum to

relieve a severe attack of asthma, showed signs of an overdose of the opiate, and was then either walked up and down the room or given artificial respiration in an attempt to mitigate the effects of the laudanum, when his heart suddenly collapsed. Even in the presence of death Mackenzie's calumniators could not be silent, and the rumour was whispered round London that he had committed suicide.

Morell Mackenzie was only fifty-four when he died. He was buried near the country home he loved, in the churchyard of St. Mary's Church at Wargrave, where the river Thames runs softly, and a simple, white marble cross, close by the lych-gate, marks his grave.

## CHAPTER EIGHT

### *A SUMMING-UP*

111

LOOKING back nearly sixty years, there seems no doubt that the Emperor Frederick III did die of cancer of the larynx; but the whole course of the disease was far from typical, and on careful examination of the available evidence there is more than a suspicion that the cancer supervened upon syphilis. In the early stage of the case the diagnosis lies between pachydermia, cancer, syphilis, or tuberculosis. Tuberculosis may be ruled out, as tuberculosis of the larynx is always secondary to tuberculosis of the lung, and the *post-mortem* examination, hurried though it was, revealed no evidence of serious pulmonary disease. Virchow gave a broad hint that at first he considered the condition to be pachydermia laryngis, but this is usually more or less bilateral and when present on one side only a suspicion of cancer will be aroused, though cancer is less likely in the posterior part of the larynx, as in this case. The small tumour on the vocal cord appears to have been completely removed, ultimately, by Morell Mackenzie, and Virchow found in it no evidence of cancer, though admittedly the piecemeal removal afforded poor specimens for the opinion of the pathologist. The most likely diagnosis, therefore, of the first tumour is that of a non-malignant granuloma, whether due to an old syphilitic infection or to the repeated cauterizations of Gerhardt or to some other cause.

The diagnosis of sub-glottic cancer during life depends largely on the evidence of Professor Waldeyer, and on re-reading this to-day it is not absolutely definite. "Professor Waldeyer said," recorded Mackenzie in *Frederick the Noble*, "that although there was no alveolar structure, he considered that from the relation of the nest-cells to one another, he thought it almost certain they had come from an alveolar structure. The nest-cells, moreover, were so abundant that he thought they could not have been produced superficially, but were evidently the result of a deep-seated destructive process." The report of the microscopic examination by Professors Virchow and Waldeyer

of the specimens taken at the *post-mortem* examination is, however, much more conclusive evidence that the final cause of death was cancer of the larynx.

The perichondritis described at considerable length by Mackenzie might possibly arise from cancer, but it sounds much more like a syphilitic perichondritis, especially the description of portions of the cartilages of the larynx necrosing off, and the complete healing of the resulting ulcers under the administration of potassium iodide. The swellings of the larynx which appeared and disappeared may be due to perichondritis caused by the cancer, but are much more likely to occur in a syphilitic larynx treated by potassium iodide; they certainly bear no resemblance to cancerous growths. The *post-mortem* report, describing the destruction of the whole of the larynx except the epiglottis, "its place being occupied by a large, flat gangrenous ulcer", is much more like the end-result of a syphilitic process than of cancer, though both diseases may well have been present. "Syphilis eats, but cancer nibbles" is an old surgical adage, though now out of date, with modern treatment, so far as syphilis is concerned. Sir StClair Thomson, in his textbook on diseases of the throat, recorded "an instructive case" which he had reported at the old London Laryngological Society in 1899: "The diagnosis of malignant disease was made by several experts after the administration of potassium iodide, where a laryngectomy was initiated and abandoned as hopeless owing to the involvement of glands, and where the patient made a spontaneous recovery after tracheotomy."

The fact that at San Remo four of the most experienced laryngologists in Europe agreed to treat the German Crown Prince with a specific remedy for the delayed results of syphilis (tertiary syphilis) shows how speculative must have been the diagnosis of many tumours of the larynx at this period, before bacteriological examination of the sputum for tubercle bacilli, X-ray examination of the lungs, and the Wassermann and Kahn blood tests for syphilis were known, and the microscopic examination of many pathological conditions was still far from precise. In his textbook Mackenzie advises that when the diagnosis of cancer of the larynx is in doubt thorough anti-syphilitic treatment should be given—and this advice was repeated by Sir StClair Thomson as late as the

1937 edition of his own textbook. Had the laryngologists any grounds for their suspicion in the case of the Crown Prince? Assuming the sketch made by Morell Mackenzie when he first saw the tumour on the Crown Prince's vocal cord (page 78) to be an accurate picture, a modern laryngologist would certainly give the opinion that such a tumour looks more like a non-malignant granuloma than a cancer; and a granuloma is not a neoplasm *sui generis* but usually the inflammatory manifestation of some specific disease such as syphilis or tuberculosis. The Crown Prince was notoriously a devoted husband, and it must have been difficult—or, indeed, impossible—for his German physicians to ask him whether he had ever had syphilis, and if he had he might not have been certain; the present writer has encountered several cases of proven syphilis of the larynx when the patient was ignorant of having had that disease.

One of the correspondents at San Remo, Jean de Bonnefon of the Paris *Gaulois*, published a book, *Drame Impérial*, in 1888, which gave circumstantial though uncorroborated details, some of which—such as the slapping of Morell Mackenzie's face by the Crown Princess when he told her "the truth" about her husband's illness—are manifestly inaccurate. De Bonnefon alleged that the Crown Prince, when visiting Suez in 1869, on the occasion of the opening by the Empress Eugénie of the Suez Canal, fell from grace—through "*l'ennui, l'orage, et je ne sais quel diable aussi*"—in the arms of a beautiful Spanish woman named Dolores Cada. Evidence of syphilis appeared nearly a month later, and the Prince was treated, though very inadequately (as all such cases were in those days) by the physician to the Khedive Ismail; his robust constitution helped him and he believed himself cured, but "*le germe n'était pas mort: il dormait*". There is no printed or written documentary evidence, other than the prolonged administration of potassium iodide, that Morell Mackenzie ever suggested that the disease from which the Crown Prince was suffering might have been tertiary syphilis, though it is well known that cancer of the larynx often follows syphilis; but it is within the knowledge of the present writer that, after the death of the Emperor, Morell Mackenzie told (as a secret) one of his most intimate friends, the late Dr. Richard King Pierce, that he felt sure the Emperor Frederick had had syphilis

of the larynx before the cancer appeared.

## II

With all these facts in mind there need be little wonder that Morell Mackenzie appeared to be vacillating in his conduct of the case and so laid himself open to criticism. It is true that in May, 1887, Mackenzie considered the laryngeal condition was not cancer; in November, 1887, he told the Crown Prince that the disease "looked very much like cancer, but that it was impossible to be certain"; a few days later he agreed with his colleagues that the disease was cancer—and yet assented to large doses of potassium iodide being given in case it was not; on 18th February, 1888, he described the disease as chronic interstitial inflammation of the larynx; at the beginning of March he accepted the microscopic evidence in favour of cancer produced by Waldeyer, and signed a joint statement with his colleagues to that effect; on 24th March he thought the disease might after all possibly be limited to perichondritis; in April he told Queen Victoria that the Emperor would not live above a few weeks; in May he was expressing hopes about "permanent improvement"; and on 31st May he told the Empress Frederick that the Emperor "might recover, though it was not probable"; on 6th June, only nine days before the Emperor's death, he discontinued daily bulletins as no longer necessary; and then on 16th June he signed a report that the disease from which the Emperor had died was cancer.

Mackenzie kept changing his mind, however, only in accordance with the varying signs and symptoms presented by the patient, possibly because of an underlying but persistent suspicion of the presence of syphilis, and his various opinions were shared by distinguished colleagues of the highest medical standing in Germany. He rightly tried to emphasize the important and indeed decisive part played in regard to diagnosis by the pathological opinion of Professor Virchow. Virchow never accepted his share in this responsibility and stated, indeed, that "while giving Sir Morell Mackenzie all credit for manual dexterity, the cardinal mistake that had been committed consisted in the Crown Prince going to England with Sir Morell and being thus withdrawn from sufficient observation by other

doctors"—a statement hardly in accordance with the facts. In May, 1888, Virchow, going rather beyond the limits of his own experience, pointed out the absence then of symptoms characteristic of cancer of the larynx; shortly afterwards he received a high decoration from the Emperor Frederick. Only a fortnight before the Emperor's death Virchow said that "the existence of a new malignant growth was unproved and the disease was localized". He was an experienced politician and was careful not to commit himself too deeply, but Virchow was quite as optimistic as Mackenzie—even on one occasion, apparently more so—and with no more justification. It is interesting and curious that Professor Virchow—because he was a German, although a keen political opponent of Bismarck—never shared the obliquity of Mackenzie after the Emperor's death, and indeed in 1890 was elected President of the International Congress of Medicine at Berlin.

One of the most unfortunate effects of the notoriety of the case upon medical opinion was that the value of the removal of a specimen of living tissue for microscopic examination (biopsy) was discredited for several decades. To-day, however, the laryngologist would get his microscopic specimen by a more exact method than that of Mackenzie's laryngeal forceps, dexterous though he was in their use: under either local or general anaesthesia he would pass the straight tube called a direct laryngoscope through the mouth down to the larynx, hold the larynx firmly in place and with suitable long straight forceps remove the desired specimen with precision. Gabriel Tucker of Philadelphia, who has reported a series of two hundred cases of cancer of the larynx, said that he has never regretted doing a biopsy for a differential diagnosis, but he has regretted very much his inability to get permission to do a biopsy until the disease was far advanced; Gluck and Soerensen of Berlin, who recorded a total of seven hundred and eighty-eight laryngectomies from their clinic, stated that they never performed a radical laryngeal operation before the tumour was proved to be cancer by microscopic study. Even when the specimen has been accurately removed mistakes may be made through pitfalls connected with the orientation, sectioning and staining of the specimen; Sir StClair Thomson said that in his series of eighty-one laryngofissures biopsy was done in eighteen (it had not yet become

usual in the earlier cases) and in two of these it was proved to be wrong. The correct attitude is for the laryngologist to rely on his clinical knowledge and experience, adding to it or correcting it by microscopic examination of a specimen. The chief criticism of Morell Mackenzie's diagnosis is that he relied too implicitly upon the results of microscopic examination—even though that examination was made by the leading pathologist in the world at the time—but, on the other hand, in his insistence on biopsy he was well in advance of his time.

## III

The stand Mackenzie took regarding the operation was perfectly correct and entirely justified. He refused to approve a laryngo-fissure (thyrotomy or "laryngotomy"), far less a laryngectomy, unless there was definite proof in this case that the tumour was cancerous. It has been suggested that Mackenzie was an opponent of the operation of laryngo-fissure as such and advocated instead the treatment of cancer of the larynx by endolaryngeal removal. That is entirely a mistaken impression. Mackenzie was certainly not an admirer of the operation of thyrotomy or laryngo-fissure as it was crudely performed in those days, but he said in 1880 in the first volume of *Diseases of the Throat and Nose*: "As regards endolaryngeal treatment [for cancer of the larynx] it need only be remarked that the radical removal of an ill-defined tumour cannot be efficiently accomplished by this method." Naturally, like Semon and other laryngologists, he preferred the endolaryngeal removal of innocent tumours to the thyrotomy that general surgeons were still performing—unjustifiably in such cases.

Professor von Bergmann persistently urged that the Crown Prince should undergo what at the very least was a laryngo-fissure and might have been a laryngectomy, on pure guesswork—for the diagnosis was entirely inferential; the tumour was certainly not typically cancerous in appearance when examined with the laryngeal mirror. The attitude of a German State Professor in pressing for such an operation upon the larynx of the Heir Apparent of the German Imperial Throne seems to evince something more than overweening self-confidence, amounting to culpable recklessness—for von Bergmann's previous experi-

ence, though boasted of in his official report, actually consisted only of seven successful thyrotomies (but none of them for cancer), one partial excision of the larynx (the patient was still alive, but the period after the operation was unrecorded and in all probability brief), and four complete excisions of the larynx (three of the operations had been followed by death and the other patient was still alive—but only six weeks had elapsed after the operation). Emil Ludwig, who apparently has little knowledge of medical statistics, calls this record of von Bergmann's "seventy per cent. in favour of success"! In the words used by the French surgeon Chavanne, when discussing the case, the advice of von Bergmann did indeed require "*un rude estomac*" on his part.

Carl Ludwig Schleich, surgeon and philosopher—best known as a pioneer of local anæsthesia—gives in his autobiography a striking picture of von Bergmann in his operating theatre. Schleich, as an old clinical assistant, friend and surgical colleague, was there with him on the afternoon of the very day on which *Die Krankheit Kaiser Friedrich des Dritten* was published, and von Bergmann addressed the following words to the students before he began the operation: "Gentlemen, I have the honour of presenting to you a patient whose condition is precisely that of our Kaiser Friedrich, who remained, most regrettably, in incompetent hands. In this case everything has been as carefully investigated, indeed more carefully." Schleich remarks that this was a smack at Virchow, of whom von Bergmann did not hesitate to hint that for political reasons he had not been over-particular and had shifted his ground during the difficult diagnosis. "My colleague Fränkel has assisted me in the laryngoscopic diagnosis, and the excised portion has revealed itself under the microscope as indubitably carcinoma. We shall now perform the operation which alone would have been calculated to preserve His Majesty's life and maintain him on the throne: the removal of, if need be, the whole of the diseased larynx. It is in some sort a historic action, the justification of German science, which I have now the opportunity of demonstrating to you. If it be God's will, all will be done here that I most urgently wished to do in His Majesty's case. But the Prussian Government, resting its hopes on the infatuation of a foreign physician, opposed my wishes. We will proceed to operate."

Schleich goes on to describe the operation: it was a very long business—the disease was not confined to one small area behind the vocal cords, as von Bergmann and Fränkel had diagnosed, but on deeper dissection revealed itself as an ulcerous plastic infiltration, which had even attacked the region above the larynx. After an hour and a half there was whispering and murmuring at the operating-table, then von Bergmann straightened his back and said: "Gentlemen, we have been mistaken. This is not carcinoma at all. It is diffuse tuberculosis of the larynx. I am discontinuing the operation." In two hours the patient was dead, and Schleich confesses that he had rarely been so profoundly shocked. He kept on thinking: if this, or something like it, had happened during the intended operation on the Emperor it would have injured the progress of surgery for a generation.

## IV

In 1878 Paul von Bruns (of Berlin) reported nineteen thyrotomies, performed on fifteen patients (four of the cases were operated on a second time) and only two survived as long as a year; with one exception there was a recurrence in every case and the subsequent progress of the disease was rapid. Eugen Hahn (of Berlin) in 1885 tabulated sixty-five cases (eleven operations by himself) of complete excision of the larynx for cancer and ten cases of partial excision (all but three for cancer): Of the complete excisions thirty were fatal from the immediate or almost immediate results of the operation, nearly all from pneumonia or "putrid bronchitis"; of the remaining thirty-five, twenty had a recurrence from which they died within a few months of operation, most of the others were recent cases and only one could be claimed as cured; of the seven partial excisions for cancer, one died from the operation, three of recurrence in a few months, and the other three were quite recent cases.

Henry Butlin, the pioneer general surgeon of throat disease in England, wrote in 1883 that the inclination of almost all surgeons must be to say that complete excision of the larynx was unjustifiable, for it was extremely dangerous and gave no hope of permanent relief; but he pointed out that the cases had not so far been selected with special reference to the origin and

probable course of the disease. He observed also that there was not the slightest encouragement to perform the operation of thyrotomy for the removal of cancer of the larynx, whether extrinsic or intrinsic: "the disease was evidently far too deeply seated to admit of removal by so slight an operation". In 1887 Butlin wrote that complete excision of the larynx had hitherto been in every respect unsuccessful; moreover, the condition of many of the patients who were treated was not only not improved during the time they lived, but actually made worse by the operation. Four years experience had, however, made him more optimistic about the operation of partial excision of the larynx for cancer "so far as the immediate recovery of the patient was concerned", but he pointed out that the cases so far were too few in number to allow very decided opinions to be drawn from them. Butlin's good results in operating for cancer of the larynx began only in 1899, when the cases for operation began to be chosen more suitably.

Felix Semon made his first contribution of any note to a medical discussion at the Clinical Society of London in 1878, in protesting against the removal by the great Lister of an innocent growth from the larynx by external operation, when it could have been removed internally with the aid of a laryngeal mirror without risk—Semon's protest was received at the meeting with the unusual tribute there of loud applause (according to his own account). In 1886 Semon expressed the opinion (in Heath's *Dictionary of Practical Surgery*) that thyrotomy should not be undertaken for cancer of the larynx. He subsequently became one of the most convinced upholders of the value of thyrotomy, but only in cases of early cancer of the larynx, emphasizing the supreme importance of selecting cases suitable for that operation and not already beyond its scope; but even Semon began to achieve good results (fifteen out of eighteen cases clear of recurrence after a year—nowadays the Royal Society of Medicine will not allow a case of cancer of the larynx to be shown as a cure until after the lapse of five years, and even then the word "cure" is deprecated) only after 1900, when the diagnosis of the disease and the technique of the operation had improved. The claims of Semon in his autobiography are absurd—that if he had been consulted in the case of the Crown Prince the patient's life would probably have been saved; they

are based on his results nearly twenty years later, and in 1887 he was no more successful than anyone else, besides being very much less experienced than Mackenzie.

The reasons why the results of thyrotomy or laryngo-fissure were so uniformly bad in the early days were: First, the cases for the operation were badly selected, for unless the growth is recognized early and is definitely limited to one vocal cord a complete removal of the whole larynx will be necessary; secondly, at the actual operation the growths were incompletely removed, owing to lack of appreciation of their real extent, so that recurrence—followed by death—was inevitable in almost every case; thirdly, the patients were mistakenly given very deep anæsthesia—for light chloroform anæsthesia was considered conducive to sudden heart failure—followed by opiates, so that they were unable to cough and clear their lungs for many hours or even days after the operation, and pneumonia frequently developed. Sir StClair Thomson attributed his own long successful series of laryngo-fissures without a death most of all to the fact that none of his patients received morphine or other sedatives, either before or after the operation, for he had a number of deaths when he followed the usual practice in his earlier cases of giving opiates. The comparatively frequent and usually successful laryngo-fissures of to-day are due not only to earlier diagnosis and improved operative technique, but to advances in anæsthesia and after-treatment.

If in 1887 Morell Mackenzie had diagnosed the case of the Crown Prince as cancer of the larynx and had then expressed the view that the operation urged by the German surgeons and physicians was unjustifiable on account of the undoubted risk to life, and that conservative treatment and careful nursing would prevent suffering and prolong life—Henry Butlin stated in 1883 that when tracheotomy was performed in cancer of the larynx life was prolonged in some cases for eighteen months or two years—his position would have been unassailable, although he would still have been the target of attack from von Bergmann and his colleagues, who undoubtedly would have minimized the risk of operation and emphasized the supposedly early stage of the growth.

## V

Professor Gerhardt insisted that in no other case known to him had the growth been recognized so early—"in the germ"—as in that of the Crown Prince, which made it particularly suitable for operation. This no doubt was honestly his opinion, for he was unlikely to have seen any cases of cancer of the larynx as early as they are often seen to-day—due chiefly to improvement in the education of doctors, for it is nowadays generally recognized that a specialist opinion should be obtained in any case of hoarseness that has persisted for more than three weeks. But a growth of the larynx when handled and inspected directly—as when the larynx is split open by thyrotomy—is always found to be more extensive than would ever be guessed by its reflection in the laryngeal mirror. Every laryngologist of any experience has received this unpleasant shock when operating on the larynx, and there seems no doubt whatever that Professors Gerhardt and von Bergmann failed utterly to appreciate the extent of the growth in the case of the Crown Prince. After all, their diagnosis or conjecture of cancer of the larynx was made, not on the sub-glottic growth that eventually was to prove fatal, but on the small tumour on the vocal cord which Mackenzie eventually removed completely, in which no cancerous elements were found, and which never recurred, at least in that position.

In 1887 cancer of the larynx was seldom seen in an early stage. Mackenzie himself said—mistakenly—in his textbook in 1880 that "the site of the tumour is in most cases one of the ventricular bands [above and external to the vocal cords], but in some instances one of the vocal cords, the epiglottis, or the ary-epiglottic folds are the first part of the larynx to be attacked." In two of the fifty-three cases which he had seen up to that date the left vocal cord and sub-glottic region was first attacked—the area first affected in the case of the Crown Prince; so that Mackenzie was not unfamiliar with this type of growth, as has been suggested. Even in 1894, when Felix Semon recorded fifty-five cases of intrinsic cancer of the larynx, while in fifteen of these cases the lesion was on the vocal cord, in no fewer than thirty-five the exact point of origin of the growth could not be determined—showing that the patients did not present themselves until a late stage of the disease.

Whether an innocent growth was present on the vocal cord and a malignant growth developed later in the sub-glottic region (as Morell Mackenzie was inclined to believe), or whether—as has been suggested—the tumour on the vocal cord was a projection upward from a sub-glottic malignant growth present from the beginning but not seen, as it was hidden under the vocal cord, it is impossible to tell now; but the portions removed from the vocal cord apparently contained no cancerous elements. It is even possible that the reason why the portions removed by Mackenzie were not considered by Virchow to be cancerous may have been because it was a rare type of tumour, not then recognized as truly malignant—for pathology as well as laryngology was still at an early stage of development in the 'eighties. It is now known that although ninety-eight per cent. of malignant growths of the larynx are "squamous-celled" cancers (an ingrowth of typically flat surface body-cells), easily recognizable, yet the other two per cent. include at least a dozen different types of malignant growth, as well as half a dozen even rarer border-line varieties and some other pre-cancerous conditions.

Professor von Bergmann might have been unpleasantly surprised if he had opened the Crown Prince's larynx even at the earliest moment that operation was contemplated. So far from finding only a small tumour "in germ", he might have been confronted also with a sub-glottic growth of unusual type, arising from below the left vocal cord—and possibly exhibiting an insignificant portion above it, towards the posterior end of the vocal cord. It would have been impossible to remove such a growth completely, without the probability of recurrence, except by total laryngectomy—an operation of which the mortality in 1887 was certainly over ninety per cent and probably nearer one hundred per cent, and the few who survived for some months—not longer—were mutilated and miserable. Nowadays the operative mortality of this operation, according to Chevalier Jackson, is about fifteen per cent—though a few specially experienced surgeons achieve a better figure—and in spite of technical improvements which make the patient happier afterwards, such as an artificial voice-box and speech training, the operation is one which even to-day many laryngologists hesitate to advise, especially since the introduction of radium and X-ray treatment.

## VI

It has been asserted that Morell Mackenzie buoyed up the Emperor Frederick with false hopes and misled the German Imperial family by promising what he could never hope to accomplish, that his optimistic outlook in the case was entirely unfounded and unjustified, if not deliberately deceptive, and that his reports at different stages of the illness were considered by Queen Victoria and other members of the Royal Family to be "contradictory and equivocal". In the face of events there can be little truth in these assertions, for Mackenzie retained the confidence of the whole Royal Family long after the Emperor's death, attending, as has been noted, the Prince of Wales in December, 1891. There is abundant evidence that the Emperor Frederick regarded him with undiminished affection and esteem up to the end of his life. The Empress Frederick wrote to Queen Victoria on 14th September, 1888; "Sir Morell Mackenzie showed an amount of patience and good temper which was quite extraordinary under these most trying circumstances, but only for Fritz's and my sake; as he would have gone away directly from another patient, seeing the case taken out of his hands and utterly mismanaged. I implored him to stay. I had no confidence at all in those other gentlemen, but I tried not to show it so as not to upset Fritz and make him lose faith in the doctors about him, but it was difficult enough, as he had very little confidence in them and only liked Sir Morell to touch him—with his light, gentle, and dexterous fingers."

A letter from the Empress Frederick to Morell Mackenzie, which was published with her approval in the press after her husband's death but before the publication of Mackenzie's *Frederick the Noble*, makes the physician's position clear. The Empress, in writing to Queen Victoria, commented on her letter: "You will see a letter from me to Sir Morell Mackenzie in the newspapers. He has not published it, nor has he anything to do with it. I am glad it found its way into print, as it will clear up the one point on which he is so much attacked here—that he purposely ignored, or out of stupidity failed to recognize the nature of the illness." The letter itself ran as follows, as printed in the *Nineteenth Century*: "In 1888, I took care to tell

all eminent German medical men with whom I came casually in contact, that you had said to me the first time I saw you that, though what you saw was innocent, yet you could not be sure until the fragment had been examined by Virchow, and that a malignant disease might be present somewhere out of sight but that there was no proof of it, the most unfavourable element of the case being my husband's age at the time. You told me that a benign growth and a malignant growth were seldom found together, and that you thought the growth you could see on the vocal cord was a benign one; you also said that you could not hold out any security to me that a malignant growth might not appear some day. You said then that the operation proposed was running too great a risk, that it was exposing life, and that should it succeed the condition of the patient after would be so terrible that his chances if let alone would be more favourable. I have since heard that different German medical men think this a reasonable and sensible view, and say that under the circumstances no one could have done much better. You also said, I think, that you would not have laryngotomy or larygno-fissure performed on your own throat, on the surmise or supposition of a malignant affection of the larynx without very positive proofs and not even then, the tendency of malignant disease being to re-appear in other places. Consequently there would be a possibility of having gone through that operation, and yet losing one's life after all, and by the re-appearance of the disease."

## VII

Morell Mackenzie was a man of complex and contradictory character. His Celtic ancestry showed itself in his pride, his touchiness, his bellicosity, and his eagerness to please that some wrongly called insincerity. He had a harmless liking for seeing his name in the newspapers; Charles Lowe tells that the first announcement in *The Times* of Mackenzie's being summoned to the Crown Prince, purporting to come "From our own correspondent", actually came from Mackenzie himself through the agency of his son Harry. Throughout the case Mackenzie cultivated newspaper correspondents and editors, supplying

them freely with information from his own point of view—and von Bergmann as certainly did the same from the opposite point of view, although he purported to pride himself on his adherence to strict "medical etiquette". Mackenzie's self-esteem was titillated that, from being "the friend of all singers and actors" (as Jehu Junior described him in *Vanity Fair*) in Upper Bohemian circles in London, he should become the friend and confidential adviser of the German Emperor and Empress in the innermost circle of an Imperial Court, and his daughter "the bosom friend and confidant" of the young German Princesses. Amid the German Court intrigues Mackenzie dramatized himself as the champion of the Empress, and told Queen Victoria that the Empress "was betrayed and had no one to consult"—except of course himself. Reid, Queen Victoria's physician, cautioned Henry Ponsonby, her secretary, that "at the bottom of all Mackenzie's arguments there was—self"; but that explanation is neither quite fair nor complete. After the Emperor's death Mackenzie preferred to think—and apparently told Haweis, among others—that it was the Crown Princess who had summoned him to Germany, whereas in fact, as has been shown at some length, the summons came primarily from the Crown Prince's German medical attendants.

Mackenzie was self-willed, polemical and ambitious, with at the same time an artistic and extravagant temperament and a kindly and generous nature, who had chosen the quieter and rather contemplative career of a consulting physician in preference to the more strenuous and decisive career of a surgeon. The fact that he did eventually perform operations (because of the rise of laryngology) does not affect the argument, for the laryngological operations of the day were very minor procedures to be dignified with that name, artistic and bloodless performances owing more to a keen eye and a steady, dexterous hand than to prolonged dissecting-room and operating-theatre experience, such as surgeons had to undergo. The arrogant von Bergmann considered Berlin to be the surgical centre of the world and himself the dominating figure in it. He was a "general surgeon" with the whole human body as his empire, and despised with the utmost contempt all specialists and particularly those belonging to the new specialty of laryngology, in which mere physicians were beginning to pretend to the possession of surgical skill.

Von Bergmann had in a marked degree the ruthless streak that all successful surgeons must possess, and had begun his surgical apprenticeship in the dark days before the dawn of Lister, when speed in operating and disregard of the patient's feelings were all-important in saving life or limb. Germany accepted and acclaimed the teaching of Lister before London did—in 1875 a holiday in Germany became for Lister a triumphal progress from Munich to Leipzig, Halle and Berlin—and von Bergmann even improved on some of Lister's ideas by introducing sterilization by steam, and by being a pioneer of the “aseptic” as complementing the “antiseptic” method of surgery.

Surgeons differ among themselves in their approach to the problem of the operative treatment of a patient; in surgery, as in other spheres, there are genuinely convinced “conservatives” and equally genuinely convinced “radicals”. One surgeon will refuse to operate unless there is every reason to expect a good result; another will operate on every case in which there is the slightest chance of success; there is much to be argued on both sides. The different mental attitude arises from different emotional trends in the individuals, influenced and modified by their upbringing and training. Thus in their differing characters there arose the conflict between Morell Mackenzie and von Bergmann, which showed itself in their diametrically opposite points of view regarding the Crown Prince and in their mutual antagonism and acrimony.

The suggestion of Prince Bismarck—adopted by the Ex-Kaiser William II in his reminiscences, and supported by Charles Lowe of *The Times*, who admired Bismarck and disliked MacKenzie—that Morell Mackenzie, like another Warwick, had taken it upon himself to play the political rôle of king-maker, and “to exercise a decisive influence upon the destiny of the German nation” by making his diagnosis in bad faith, has nothing to support it except “the rumours of Berlin coffee-rooms”, and may be dismissed as an early but typical example of German propaganda. There is abundant evidence that the Emperor Frederick was himself anxious to reign, even if it were to prove for a brief period only: his own recorded remarks, his anxiety to make provision for his wife and family, the lists of honours for his friends and supporters, long excluded from such royal recognition.

Except for the persistent and vindictive campaign against Morell Mackenzie—which was only part of the Bismarckian and reactionary “Junker” campaign against Liberal ideas, the Empress Frederick, and everything English—and the hasty and ill-judged production as a “popular” book of the rather bad-tempered *Frederick the Noble*, understandable when the preceding German pamphlet has been read and as the reaction of a sick man to bitter and undeserved criticism instead of the applause and admiration he had confidently expected, it is not at all clear to-day why Mackenzie’s name should at once have become execrated in two continents—for Bryson Delavan tells that Mackenzie’s American publishers gave up the idea of issuing a new edition of his famous textbook “because it became apparent that no volume associated with his name would be likely to succeed”. Mackenzie seems to have had, in the words of Monypenny when comparing Shelburne with Disraeli, “the unfortunate art of making himself distrusted more even than was justified by anything we could discern in his motives and conduct”. The shrill cries of Sir Felix Semon pursued Mackenzie beyond the grave: “He killed my Emperor,” Semon kept repeating for many years—for Semon retained his German nationality until he received an English Court appointment in 1901.

Mark Hovell, Mackenzie’s disciple, supporter and admirer, once said to the present writer: “Morell Mackenzie was a great man, but he was a bit of a humbug as well.” Humbug, however, is not eternal—in spite of Archbishop Magee’s remark to the contrary. Time is proving the soundness of Mackenzie’s many fundamental contributions to laryngology, and it is beginning to be recognized that the art and science of medicine owes more to him than has been realized in the past. Morell Mackenzie was truly the Father of British Laryngology: the first English laryngologist, the founder of the first hospital for diseases of the throat in the world, the founder (with his assistant Norris Wolfenden) of the *Journal of Laryngology*, the author of the first standard textbook on diseases of the throat, the protagonist of the scientific study of disease of the throat among English-speaking doctors. It was unfortunate that, worn out at what should have been the height of his powers, his premature death prevented the rehabilitation of his professional reputation

during his lifetime. But in history Morell Mackenzie will be remembered—as indeed he would have preferred to be remembered—as the chivalrous physician who, single-handed and in the face of overwhelming opposition and intrigue, by his determined intervention prolonged the life and effected the accession of an emperor.

## BIBLIOGRAPHY

### CHAPTER ONE

ALLINSON, A. R., translated and edited by: *The War Diary of the Emperor Frederick III, 1870-1871*. London, 1927.

ANONYMOUS: *The Empress Frederick*. London, 1913.

VON BERGMANN, GERHARDT AND OTHERS: *Die Krankheit Kaiser Friedrich des Dritten*. Berlin, 1888.

BUCKLE, G. E., edited by: *Letters of Queen Victoria*, Third Series, Vol. I. London, 1930.

BUSCH, M.: *Bismarck: Some Secret Pages of his History*, 3 vols. London, 1898.

DELAVAN, D. BRYSON: "Personal Recollections of a Great Laryngologist." Sir Morell Mackenzie. *Annals of Otology and Laryngology*, June, 1933. Vol. XLII, p. 321.

DONELAN, J.: "Morell Mackenzie, the Father of British Laryngology." *Journal of Laryngology*, 1919. Vol. XXXIV, p. 181.

FREYTAG, G.: *The Crown Prince and the German Imperial Throne*. Trans. by G. Duncan. London, 1890.

GREY, Viscount: *Falldon Papers*. London, 1926.

HAWEIS, H. R.: *Sir Morell Mackenzie: Physician and Operator*. London, 1893.

HAZLITT, W.: "On Reading old Books." *The Plain Speaker*, Vol. II. London, 1826.

VON HOHENLOHE, Prince ALEXANDER: *Memoirs*. London, 1925.

HOW, H.: Illustrated Interviews, No. VIII: Sir Morell Mackenzie. *Strand Magazine*, 1892. Vol. III, p. 115.

JACKSON, CHEVALIER: *An Autobiography*. New York, 1938.

LOWE, C.: *The Tale of a Times Correspondent*. London, 1927.

LUDWIG, E.: *Kaiser Wilhelm II*. Trans. by E. C. Mayne, London, 1926.

MCBRIDE, P.: "Sir Felix Semon: His Work and its Influence on Laryngology." *Journal of Laryngology*, 1913. Vol. XXVIII, pp. 113, 169.

MACDONALD, GREVILLE: *Reminiscences of a Specialist*. London, 1932.

MACKENZIE, MORELL: *Diseases of the Throat and Nose*. 2 vols. London. Vol. I, 1880; Vol. II, 1884.  
*The Use of the Laryngoscope*. London, 1865.  
*The Fatal Illness of Frederick the Noble*. London, 1888.  
*Essays*, edited by A. W. Mackenzie. London, 1893.

MOORE, IRWIN: "The Scientific Relics of Morell Mackenzie." *Journal of Laryngology*, 1919. Vol. XXXIV, p. 278.  
"A Defence of Sir Morell Mackenzie." *The Spectator*, 1926. Vol. 137, p. 900.

RONSONBY, Sir FREDERICK: *Letters of the Empress Frederick*. London, 1928.

RADZIWILL, Princess CATHERINE: *The Empress Frederick*. London, 1934.

ROBERTS, DOROTHEA: *Two Royal Lives: the Crown Prince and Princess of Germany*. London, 1887.

ROBERTSON, C. GRANT: *Bismarck*. London, 1918.

RODD, RENELL: *Crown Prince and Emperor: a biographical sketch*. London, 1888.

*Social and Diplomatic Memories*. London, 1922.

*The Times*, 1926, Nov. 25 and Dec. 1.

SEMON, Sir FELIX: *Autobiography*, edited by Henry C. Semon and T. A. McIntyre. London, 1926.

TAYLOR, LUCY: *Fritz of Prussia: Germany's Second Emperor*. London, 1891.

WELSCHINGER, H.: *L'Empereur Fréderic III*. Paris, 1917.

WHITMAN, SIDNEY: *Life of the Emperor Frederick*. Edited from the German of Margaretha von Poschinger. London, 1921.

WILLIAM II, Ex-Kaiser: *My Early Life*. London, 1926.

*British Medical Journal*: "Laryngological Summer Meeting." 1921, Vol. I, p. 855.

*Dictionary of National Biography*, 1893, Vol. XXXV: article on Sir Morell Mackenzie, p. 159.

*Encyclopædia Britannica*, Vol. XIV, 14th edition: article on Sir Morell Mackenzie, p. 588.

*Journal of Laryngology*: "Section of Laryngology Summer Meeting," 1921, Vol. XXXVI, p. 367.

*Reading Observer*, June 11th, 1921.

*The Times*, 1887 and 1888.

*The Times*, 1890. Mackenzie v. Steinkopff, and v. Walter and Another, March 1, p. 5.

## CHAPTER TWO

ABRAHAM, J. JOHNSTON: "The Early History of Syphilis." *British Journal of Surgery*, 1944. Vol. XXXII, p. 225.

BABINGTON, B.: *Transactions of the Hunterian Society*, March, 1829.

BANCROFT, Mr. and Mrs.: *On and Off the Stage: written by themselves*. 2 Vols. London, 1888.

BETTANY, G. T.: *Eminent Doctors: Their Lives and Work*. London, 1885. Vol. II, p. 249.

BRYAN, J. H.: "The History of Laryngology and the Influence of America in the Development of this Specialty." *Annals of Medical History*, 1933, Vol. V, p. 152.

BUCK, GURDON: *Trans. Amer. Med. Assoc.*, 1853, Vol. VI, p. 509.

BULLOCH, J. M.: "Hereditary Theatrical Families: The Comptons." In *Who's Who in the Theatre*, edited by John Parker. London, 1936, p. 1597.

CASTIGLIONI, A.: *History of Medicine*. Translated and edited by E. B. Krumbhaar. New York, 1941.

CELSUS: *De Medicina*, Book VII, Paragraph 12. Loeb Edition translated by W. G. Spencer. London, 1935, Vol. III, pp. 371, 373.

COLLEDGE, L.: "Amalgamation between Golden Square and Central London Throat Hospitals." *Journal of Laryngology*, 1942, Vol. LVII, p. 113.

CZERMAK, J.: *Wien. Medizin. Wochenschrift*, 1858, March 27. "Der Kehlkopfspiegel. Leipzig, 1863.

DELAVAN, D. BRYSON: "Personal Recollections of a Great Laryngologist: Sir Morell Mackenzie." *Annals of Otology and Laryngology*, June, 1933, Vol. XLII, p. 321. "History of Thyrotomy and Laryngectomy." *The Laryngoscope*, 1933, Vol. XLIII, p. 81.

DONELAN, J.: "Morell Mackenzie, the Father of British Laryngology." *Journal of Laryngology*, 1919, Vol. XXXIV, p. 181.

GARCIA, M.: "Physiological Observations on the Human Voice." *Proceedings of the Royal Society of London*, 1855, Vol. VII, p. 399; also *London, Edinburgh and Dublin Philosophical Magazine*, 1855, Vol. X, p. 218.

*Transactions of the Section of Laryngology of the Seventh International Congress of Medicine*, London, 1881, Vol. III, p. 197.

GARRISON, F. H.: *An Introduction to the History of Medicine*, 4th edition. Philadelphia, 1929.

HAWEIS, H. R.: *Sir Morell Mackenzie: Physician and Operator*. London, 1893.

HOLMES, GORDON: "History of Laryngology." *Medical Press and Circular*, 1885, Vols. 39, 40.

HOW, H.: "Illustrated Interviews, No. VIII, Sir Morell Mackenzie." *Strand Magazine*, 1892, Vol. III, p. 115.

JACKSON, CHEVALIER: *An Autobiography*. New York, 1938.

LEVIEN, J. M.: *The Garcia Family*. London, 1932.

LEVRET: *Mercure de France*, 1743.

LISTON, R.: *Practical Surgery*. London, 1840.

MACDONALD, GREVILLE: *Reminiscences of a Specialist*. London, 1932.

MACKENZIE, FAITH COMPTON: *Always Afternoon*. London, 1943, p. 117.

MACKENZIE, MORELL: *Transactions of the Pathological Society of London*, 1862 to 1874, Vols. XIII to XXV.

*The Use of the Laryngoscope*. London, 1865.

*Growthths in the Larynx*. London, 1871.

*Pharmacopæia of the Hospital for Diseases of the Throat*. London, 1872.

*Diphtheria, its Nature and Treatment*. London, 1879.

*Diseases of the Throat and Nose*. 2 vols. London. Vol. I, 1880; Vol. II, 1884.

*Hygiene of the Vocal Organs*. London, 1888.

"The Progress of Laryngology." *British Medical Journal*, 1888, Vol. II, Nov. 17.

*Essays*, edited by A. W. Mackenzie, London, 1893.

MOORE, IRWIN: "The Scientific Relics of Morell Mackenzie." *Journal of Laryngology*, 1919, Vol. XXXIV, p. 278.

SEGOND, M.: *Gazette Hébdomadaire de Médecine et de Chirurgie*. Paris, 1855. Nov. 16, p. 816.

SEMON, FELIX: *Forschungen und Erfahrungen*, 1880-1910. 2 vols. Berlin, 1912.

"The Discovery of Laryngoscopy and the case of Türck-Czermak." *Berlin Klin. Wochenschrift*, 1906.

"Sir Morell Mackenzie." *International Centralblatt für Laryngologie*, 1892, Vol. VIII, No. 9.

*Autobiography*, edited by Henry C. Semon and T. A. McIntyre. London, 1926.

TURCK, L.: *Zeitschrift der Gesellschaft der Aerzte zu Wien*, 1858, April 26. *Praktische Anleitung zur Laryngoskopie*. Vienna, 1860.

WOLFENDEN, N.: "Memoir of Sir Morell Mackenzie." *Journal of Laryngology*, 1892, Vol. VI, p. 95.

WRIGHT, JONATHAN: *History of Laryngology and Rhinology*, Philadelphia, 1914.

*Annual Register*, 1886, 1887.

*British Medical Journal*: "Obituary of Sir Morell Mackenzie," 1892, Vol. I, p. 362.

*Contemporary Medical Men*. Vol. II. Leicester, 1888.

*Dictionary of National Biography*: articles on Sir Rowland Hill, Sir Morell Mackenzie, J. A. Symonds.

*Kelly's Handbook to the Titled, etc. Classes*, 1943.

*Lancet*: "Obituary of Sir Morell Mackenzie." 1892, Vol. I, p. 394.

*The Times*: "Obituary of Sir Morell Mackenzie." 1892, Feb. 4, p. 6.

## CHAPTER THREE

ALLINSON, A. R. Translated and edited by: *The War Diary of the Emperor Frederick III, 1870-1871*. London, 1927.

ANONYMOUS: *The Empress Frederick*. London, 1913.

von BISMARCK, PRINCE OTTO: *Reflections and Reminiscences*, 2 vols. English translation under supervision of A. J. Butler. London, 1898. *Thoughts and Recollections*. London, 1899.

BOLITHO, HECTOR: *Victoria and Albert*. London, 1938.

BUSCH, M.: *Bismarck: Some Secret Pages of his History*, 3 vols. London, 1898.

zu EULENBURG-HERTFELD, Count PHILIPP: *Aus 50 Jahren*. Berlin, 1923.

FREYTAG, G.: *The Crown Prince and the German Imperial Throne*. Trans. by G. Duncan, London, 1890.

GREVILLE, CHARLES C. F.: *The Greville Memoirs*, edited by H. Reeve, Vol. VI. London, 1896.

HEADLAM, J. W.: *Bismarck and the Foundation of the German Empire*. London, 1899.

LUDWIG, EMIL: *Bismarck: the story of a fighter*. Translated by Eden and Cedar Paul. London, 1927.

PERRIS, G. H.: *Germany and the German Emperor*, 2nd ed. London, 1914.

PONSONBY, ARTHUR: *Henry Ponsonby: Queen Victoria's Private Secretary*. London, 1942.

PONSONBY, Sir FREDERICK: *Letters of the Empress Frederick*. London, 1928.

PONSONBY, MAGDALEN: *Mary Ponsonby: a memoir*. London, 1927.

VON POSCHINGER, M.: *Diaries of the Emperor Frederick*. Trans. by Francis M. Welby. London, 1902.

RADZIWILL, Princess CATHERINE: *The Empress Frederick*. London, 1934.

ROBERTS, DOROTHEA: *Two Royal Lives: The Crown Prince and Princess of Germany*. London, 1887.

ROBERTSON, C. GRANT: *Bismarck*. London, 1918.

RODD, RENNELL: *Crown Prince and Emperor: a biographical sketch*. London, 1888.

SIMON, E.: *L'Empereur Frédéric*. Paris, 1888.

STRACHEY, LYTON: *Queen Victoria*. London, 1921.

SUTHERLAND-GOWER, Lord RONALD: *Records and Reminiscences*. London, 1903.

VON WALDERSEE, Count ALFRED: *A Field-Marshal's Memoirs*. Translated by Frederic Whyte. London, 1924.

WELSCHINGER, H.: *L'Empereur Frédéric III*. Paris, 1917.

WEYMSS, Mrs. ROSSLYN, his daughter, edited by: *Memoirs and Letters of Sir Robert Morier*. London, 1911.

WHITMAN, SIDNEY: *Life of the Emperor Frederick*. Edited from the German of Margaretha von Poschinger. London, 1901.

WILLIAM II, Ex-Kaiser: *My Memoirs, 1878-1918*. London, 1922.

*My Early Life*. London, 1926.

*Cambridge Modern History*, Vols IX to XII. Cambridge, 1934.

*The Times*: "Obituary of the Emperor Frederick III," 1888. July 16.

#### CHAPTER FOUR

VON BALLHAUSEN, L.: *Bismarcks Erinnerungen*. Stuttgart, 1920.

VON BERGMANN, GERHARDT AND OTHERS: *Die Krankheit Kaiser Friderich des Dritten*. Berlin, 1888.

VON BISMARCK, Prince OTTO: *Reflections and Reminiscences*, 2 vols. London, 1898.

BUCKLE, G. E., edited by: *Letters of Queen Victoria*, Third Series, Vol. I. London, 1930.

COLLEDGE, LIONEL: "The Laryngeal Disease of the Emperor Frederick." *Journal of Laryngology*, 1936. Vol. LI, p. 31.

HAHN, E.: *Volkmann's Sammlung Klinische Vorträge*, 1885. No. 260.

VON HOHENLOHE, Prince ALEXANDER: *Memoirs*. London, 1925.

JACKSON, CHEVALIER and JACKSON, C. L.: *Cancer of the Larynx*. Philadelphia and London, 1939.

LUC, H.: *La Maladie de l'Empereur Frédéric III*. Paris, 1888.

LUDWIG, E.: *Kaiser Wilhelm II*. Translated by E. C. Mayne. London, 1926.

MACKENZIE, MORELL: *Growths in the Larynx*. London, 1871.  
*Diseases of the Throat and Nose*, Vol. I. London, 1880.  
*British Medical Journal*, 1887. Vol. II, Nov. 19, p. 1127.  
*The Fatal Illness of Frederick the Noble*. London, 1888.

MACKENTY, JOHN E.: "Surgical Treatment of Laryngeal Cancer." *New York State Journal of Medicine*, October, 1922.

MOORE, IRWIN: *Intrinsic Cancer of the Larynx and the Operation of Laryngo-Fissure*. London, 1921.

NOWAK, K. F.: *Kaiser and Chancellor*. Translated by E. W. Dickes. London, 1930.

PACK, G. T. and CAMPBELL, R.: "The Laryngeal Cancer of Frederick III of Germany." *Annals of Medical History*, 1940, Third Series, Vol. II, p. 151.

PONSONBY, Sir FREDERICK: *Letters of the Empress Frederick*. London, 1928.

RODD, RENNELL: *Social and Diplomatic Memories*. London, 1922.  
*The Times*, 1926, Nov. 25 and Dec. 1.  
*The Times*, 1928, Jan. 18.

SEMON, FELIX: "Malignant Disease of the Larynx"; in Heath's *Dictionary of Practical Surgery*. Vol. I, London, 1886.  
*Autobiography*, edited by Henry C. Semon and T. A. McIntyre. London, 1926.

SEMON, HENRY C.: *The Times*, 1928. Jan. 25.

THOMSON, Sir STCLAIR: *British Medical Journal*, 1921, Vol. I, p. 921.  
 "Sub-glottic Cancer of the Larynx." *Journal of Laryngology*, 1937, Vol. LII, p. 803.

THOMSON, Sir STCLAIR and COLLEDGE, L.: *Cancer of the Larynx*. London, 1930.

TOBOLD: *Laryngoscopie*. Berlin, 1874.

VIRCHOW, R.: *Berliner Klinische Wochenschrift*, 1887, Vol. XXIV, pp. 445, 585, 876.  
*British Medical Journal*, 1888, Vol. I, Feb. 18, p. 370.

WILLIAM, II, Ex-Kaiser: *My Memoirs, 1878-1918*. London, 1922.  
*My Early Life*. London, 1926.  
*Annual Register*, 1887.  
*Illustrated London News*, June-July, 1887.  
*The Scotsman*, 1887, June 22.  
*The Times*, 1887, June 22.

## CHAPTERS FIVE AND SIX

VON BERGMANN, GERHARDT AND OTHERS: *Die Krankheit Kaiser Friedrich des Dritten*. Berlin, 1888.

BOLITHO, HECTOR, edited by: *Further Letters of Queen Victoria (from the Archives of the House of Brandenburg-Prussia)*. London, 1938.

BUCKLE, G. E., edited by: *Letters of Queen Victoria, Third Series*, Vol. I. London, 1930.

LEVESON-GOWER, Sir GEORGE: *Years of Endeavour, 1886-1907*. London, 1942.

LOWE, C.: *The Tale of a Times Correspondent*. London, 1927.

MACKENZIE, MORELL: "The Case of the Crown Prince of Germany from his visit to England till arrival at San Remo." *British Medical Journal*, 1887. Vol. II, p. 1127.  
"The Case of the Crown Prince of Germany (at San Remo)." *British Medical Journal*, 1888. Vol. I, p. 370.  
"The late German Emperor: Clinical History of the Case." *British Medical Journal*, 1888. Vol. I, p. 1351.  
*The Fatal Illness of Frederick the Noble*. London, 1888.

PARKINSON, F. C.: in Haweis's *Sir Morell Mackenzie: Physician and Operator*. London, 1893. p. 158.

RONSONBY, ARTHUR: *Henry Ponsonby: Queen Victoria's Private Secretary*. London, 1942.

RONSONBY, Sir FREDERICK: *Letters of the Empress Frederick*. London, 1928.

RODD, RENNELL: *Social and Diplomatic Memories*. London, 1922.

SEMON, Sir FELIX: *Autobiography*, edited by Henry C. Semon and T. A. McIntyre. London, 1926.

VIRCHOW, R.: *Berliner Klinische Wochenschrift*, 1888. Feb. 18.  
*The Times*, 1888, June 3 (dated Berlin, June 1).  
*British Medical Journal*, 1887, 1888.  
*Contemporary Review*, 1888.  
*The Lancet*, 1887, 1888.  
*The Scotsman*, Sept.-Dec., 1887; Jan.-June, 1888.  
*The Times*, Sept.-Dec. 1887, Jan.-June, 1888.

## CHAPTER SEVEN

VON BERGMANN, GERHARDT AND OTHERS: *Die Krankheit Kaiser Friedrich des Dritten*. Berlin, 1888.

VON BISMARCK, Prince OTTO: *Reflections and Reminiscences*, Vol. II. pp. 330, 331. London, 1898.

BUCKLE, G. E., edited by: *Letters of Queen Victoria, Third Series*. Vol. I. London, 1930.

BUTLIN, HENRY T.: *British Medical Journal*, 1887, Vol. I, June 4.

DELAVAN, D. BRYSON: *Annals of Otology and Laryngology*, June, 1933. Vol. XLII, p. 321.

DONELAN, J.: *Journal of Laryngology*, 1919, Vol. XXXIV, p. 181.

HAWEIS, H. R.: *Sir Morell Mackenzie: Physician and Operator*. London, 1893.

VON HOHENLOHE, Prince ALEXANDER: *Memoirs*. London, 1925.

LEE, Sir SIDNEY: *King Edward VII: a biography*. London, Vol. I, 1925; Vol. II, 1927.

LITTLE, E. MUIRHEAD: *History of the British Medical Association*. London, 1932.

LUDWIG, E.: *Kaiser Wilhelm II*. Translated by E. C. Mayne. London, 1926.

MACDONALD, GREVILLE: *Reminiscences of a Specialist*. London, 1932.

MACKENZIE, MORELL: *The Fatal Illness of Frederick the Noble*. London, 1888.

“The Progress of Laryngology,” *British Medical Journal*, 1888. Vol. II, Nov. 17.

*Essays*, edited by A. W. Mackenzie. London, 1893.

PONSONBY, ARTHUR: *Henry Ponsonby: Queen Victoria's Private Secretary*. London, 1942.

PONSONBY, Sir FREDERICK: *Letters of the Empress Frederick*. London, 1928.

ROBERTSON, C. GRANT: *Bismarck*. London, 1918.

RODD, RENNELL: *Crown Prince and Emperor: a biographical sketch*. London, 1888.

*Social and Diplomatic Memories*. London, 1922.

SEMON, Sir FELIX: *Autobiography*, edited by Henry C. Semon and T. A. McIntyre. London, 1926.

WILLIAM, II, Ex-Kaiser: *My Memoirs, 1878-1918*. London, 1922. *My Early Life*. London, 1926.

*British Medical Journal*: “Handwriting of the Dying Emperor,” 1888, Vol. II, Oct. 13, p. 835.

*British Medical Journal*: “The Case of the Emperor Frederick,” 1888, Vol. II, Oct. 20, p. 887.

*British Medical Journal*: Correspondence regarding the Royal College of Physicians and Sir Morell Mackenzie. 1888, Vol. II, Dec. 22, p. 1412.

*The Scotsman*: 1888, Dec. 5; Dec. 6; leading article on Dec. 7.

*The Times*: “The Last Illness of the Emperor Frederick III. An Impartial Review.” 1888, Oct. 16.

*The Times*: Mackenzie v. Steinkopff, and v. Walter and Another. 1890, March 1, p. 5.

## CHAPTER EIGHT

VON BERGMANN, GERHARDT AND OTHERS: *Die Krankheit Kaiser Friedrich des Dritten*. Berlin, 1888.

DE BONNEFON, JEAN: *Drame Impérial*. Paris, 1888.

VON BRUNS, PAUL: *Die Laryngotomie zur Entfernung intralaryngealer Neubildungen*. Berlin, 1878.

BRYANT, J. H.: *Annals of Medical History*, 1933, Vol. V (N.S.), p. 152.

BUTLIN, HENRY T.: *Malignant Disease of the Larynx*. London, 1883. *The Operative Surgery of Malignant Disease*. London, 1887.

CHAVANNE, F.: "La Maladie de Frederick III." *Oto-rhino-laryng. Internat.* 1913, Vol. I, p. 3.

COLLEDGE, L.: "The Laryngeal Disease of the Emperor Frederick." *Journal of Laryngology*, 1936, Vol. LI, p. 31.

DELAYAN, D. BRYSON: *Annals of Otology and Laryngology*, June, 1933, Vol. XLII, p. 321.

GLUCK, T. and SOERENSEN, J.: *Arch.f.Laryngol.u.Rhinol.*, 1920, Vol. XXXIII, p. 84.

JACKSON, CHEVALIER and JACKSON, C. L.: *Cancer of the Larynx*. Philadelphia and London, 1939.

*Diseases and Injuries of the Larynx*, New York, 1941.

MACDONALD, GREVILLE: *Reminiscences of a Specialist*. London, 1932.

MACKENZIE, MORELL: *Diseases of the Throat and Nose. Cancer of the Larynx*. Vol. I, London, 1880, p. 334.

*The Fatal Illness of Frederick the Noble*. London, 1888.

MONYPENNY, W. F.: *Life of Disraeli*. Vol. II, London, 1910.

MOORE, IRWIN: "A Defence of Sir Morell Mackenzie." *The Spectator*, 1926, Vol. 137, p. 900.

SCHLEICH, C. L.: *Besonnte Vergangenheit*. Berlin, 1920. English translation entitled: *Those Were Good Days*, by Bernard Miall. London, 1935.

SEMON, Sir FELIX: "Radical Operation for Malignant Disease of the Larynx." *Lancet*, 1894, Vol. II, p. 1417.

"Operative Treatment of Malignant Disease of the Larynx." *British Medical Journal*, 1903, Vol. II, p. 115.

*Autobiography*, edited by Henry C. Semon and T. A. McIntyre. London, 1926.

STEVENSON, R. SCOTT: *Recent Advances in Laryngology and Otology*. Chapter IV: Cancer of the Larynx. London, 1935.

THOMSON, Sir STCLAIR: *British Medical Journal*, 1921, Vol. I, p. 921.

"Diagnosis of Cancer of the Larynx." *Journal of Laryngology*, 1931, Vol. XLVI, p. 31.

"Sub-glottic Cancer of the Larynx." *Journal of Laryngology*, 1937, Vol. LII, p. 803.

THOMSON, Sir STCLAIR and COLLEDGE, L.: *Cancer of the Larynx*. London, 1930.

THOMSON, Sir STCLAIR and NEGUS, V. E.: *Diseases of the Nose and Throat*. London, 1937.

TUCKER, GABRIEL: *Archives of Otolaryngology*, 1935, Vol. XXI, p. 1.

*Daily Telegraph*, 1888, June 6.

*Nineteenth Century*, 1888, November.

*Vanity Fair*, Oct. 15, 1887, p. 247.

## INDEX

**ABDUCTORS and Adductors**, 45  
**Academy of Medicine**, New York, 43  
**Alice**, Princess, 90  
**Apothecaries**, Society of, 28  
**Asquith**, Mr. (Lord Oxford), 160  
**Auchmar**, 24  
**Augusta**, Empress, 55, 114  
**Avery**, J., 31, 32

**BABINGTON**, 31  
**Balmoral**, 89, 98  
**Bancroft**, Mr. and Mrs., 48  
**Bardeleben**, Prof., 120, 127, 150  
**Battenberg**, Prince Alexander of, 124, 125  
**Baumès**, 31  
**Bavero**, 90  
**Bazaine**, 60  
**Bell**, Fitzroy, 158  
**Bell**, Moberly, 21  
**Benson**, Archbishop, 87  
**Bergmann**, Prof. von, 21, 66-69, 72, 76-84, 92, 96, 97, 104, 107, 109, 116-123, 127, 134, 137, 140, 142-145, 149-152, 153, 169-171, 174, 175, 178, 179  
**Berlin**, 29, 111-136.  
**Billroth**, Prof., 39, 149  
**Biopsy**, 79, 80, 81, 82, 168, 169  
**Bismarck**, Prince, 8, 16, 20, 22, 54, 58-64, 102, 111-114, 124, 125, 127, 128, 131, 133, 135, 138-141, 179, 180  
**Bismarck**, Count Herbert, 8, 75, 106, 137, 140  
**Blackie**, Prof., 20, 158, 159  
**Bonnefon**, Jean de, 166  
**Bozzini**, 31  
**Braemar**, 88, 89  
**Bramann**, Dr., 104, 109, 118, 119, 120, 121, 122, 152  
**Bretonneau**, 29  
**British Medical Association**, 4, 156, 157  
**British Medical Journal**, 105, 123, 153, 156  
**British Rhino-Laryngological Assoc.**, 157  
**Browne**, Lennox, 44, 145  
**Bruns**, P. von, 171  
**Budapest**, 29, 30, 33  
**Buck**, Gurdon, 39  
**Buist**, Dr. R. C., 158  
**Busch**, 23, 60  
**Butlin**, Sir H., 171, 172, 173

**CADA**, Dolores, 166  
**Canadian Medical Association**, 4  
**Cancer of larynx**, 38, 66, 68, 69, 91, 94, 96-100, 133-135, 164, 168-175, 177  
**Carter**, Brudenell, 25  
**Cathcart**, Dr. George, 8, 9, 17  
**Cavaillé-Col**, 30, 31  
**Celsus**, 31  
**Charcot**, 29  
**Charlottenburg**, 110, 112-129  
**Cigarette-smoking** deprecated, 51  
**Clark**, Sir Andrew, 28, 40  
**Chloroform**, 28, 68, 104, 173  
**Clarendon**, Lord, 57  
**Cocaine**, 11, 39, 65, 80  
**Cohen**, Dr. J. Solis, 47  
**Compton**, Edward, 25  
**Compton**, Miss Fay, 25  
**Compton**, Henry, 25  
**Contemporary Review**, 111, 155  
**Crown Prince**. *See* Frederick III, Emperor  
**Crown Princess**. *See* Frederick, Empress  
**Czermak**, Prof. Johann, 30-33

**DELAVAN**, Dr. Bryson, 21, 43, 46, 50, 180  
**Diaries of Emperor Frederick**, 22, 102  
**Diseases of the Throat and Nose**, 10, 11, 44-46, 74, 76, 169  
**Disraeli**, 180  
**Donelan**, Dr. James, 2, 5, 17, 44, 48, 49, 146, 154, 157  
**Duff Gordon**, Lady, 18, 19  
**Dundas-Grant**, Sir James, 4, 137, 138

**EDWARD VII**, King, 19, 33, 42, 86, 87, 106, 112, 137, 161  
**Encyclopædia Britannica**, 17  
**Epping Forest**, 25  
**Eugénie**, Empress, 55, 166

**FINDLAY**, Mr. J. R., 158  
**Fistula**, laryngo-oesophageal, 130, 131, 132  
**Frederick III**, Emperor, 1, 7, 8, 12-14, 19, 22, 55-64, 71, 73, 77, 82, 85, 87, 88, 89, 90-110, 111-132, 135, 150, 156-164, 166, 168, 176  
**Frederick**, Empress, 14, 16, 19, 21, 22, 56-58, 60, 63, 71-73, 75, 76, 83, 86, 88, 89, 91, 96, 97, 100, 101, 104, 106-

Frederick, Empress—*continued.*  
 108, 110, 111–113, 124, 127, 129,  
 131, 132, 134, 135, 140, 146, 147,  
 166, 176–177, 178, 180

Frederick the Noble, 3, 12, 18, 21, 94,  
 107, 122, 146–154, 164, 179

Fürstenberg, 7

GARCIA, Gustave, 4

Garcia, Manuel, 4, 30, 31, 32, 33

General Medical Council, 28

Gerhardt, Prof., 65–68, 72, 76–84, 92,  
 97, 137, 140, 142, 145, 148, 149, 174

German medical attendants, 14, 15, 21,  
 68, 77, 91, 94, 95, 97, 109, 127, 134,  
 142

Gibraltar, 24

Greenwood, Frederick, 159, 160

Gluck, Prof. T., 168

Greig, Dr. Glennie, 26

Grey, Viscount, 5

Guildhall School of Music, 18

Gull, Sir Wm., 54

HAHN, Eugen, 68, 171

Harley Street, No. 19, 23, 40, 51, 69,  
 87, 141, 161, 162

Hart, Dr. Ernest, 156

Harvard Union, 5

Hawaii, Queen of, 86

Haweis, Rev. H. R., 5, 6, 7, 24, 48, 72,  
 141, 162, 178

Hazlitt, Wm., 5

Helmholtz, 57

Henry, Prince, of Prussia, 101, 106, 128

Herodotus, 47

Highmore, 11

Hinzpeter, Dr. 100

Hohenlohe, Prince Alexander von, 21,  
 74, 137

Hohenzollern family, 1, 15, 56, 57, 139

Hohenzollern Order, conferred on Mac-  
 kenzie, 115

Holmes, Gordon, 10, 17, 44

Hopkins, Johns, Hospital, 44

Hovell, Mark, 4, 12, 17, 44, 88, 90, 91,  
 99, 100, 101, 102, 104, 107, 109, 110,  
 114, 115, 116, 123, 127, 130, 131, 133,  
 134, 135, 145, 146, 152, 156, 180

Hunt, Dr. Middlemass, 50

Hutchinson, Sir Jonathan, 28, 40

INTERNATIONAL Congress of Medicine  
 —Copenhagen, 46, 70, 157; London,  
 157; Berlin, 168

Irving, Sir Henry, 8, 41

JACKSON, Dr. Chevalier, 21, 72, 79, 175

Jenner, Sir Wm., 40, 54

Jubilee, Queen Victoria's, 84–87, 101,  
 145

Krankheit Kaiser Friedrich des Dritten,  
 21, 142–145, 170

Krause, Dr., 92, 94, 95, 100, 104, 109,  
 116, 127, 130, 145

Kussmaul, Prof., 108

Lancet, The, 3, 28, 105, 153

Landgraf, Dr., 84, 88, 145, 151, 152

Langerhans, Dr., 134

Laryngectomy, 1, 39, 67, 78, 94, 95, 96,  
 97, 115, 169, 175

Laryngo-fissure, 7, 39, 83, 169, 172, 173,  
 174, 177

Laryngology, *Journal of*, 17, 21, 180

Laryngology, Section of, R.S.M., 3, 17,  
 154, 157, 172

Laryngoscopy, 30–33

Law, Edward, 8

Leveson-Gower, Sir G., 115

Levien, Mr. J. Mewburn, 18, 49, 50

Levret, 31

Leyden, Prof., 126, 127, 131

Leytonstone, 23, 25, 26, 27

Libel action, Mackenzie's, 20, 21, 159–  
 161

Lincoln, Dr. Rufus P., 43

Lister, Lord, 28, 39, 172, 179

Liston, R., 31, 32

Loë, General von, 112

Lomond, Loch, 24

London Hospital, 28, 33, 34, 40, 41, 155

Lowe, Charles, 19, 20, 21, 119, 177, 179

Ludwig, Emil, 14, 15, 16, 75, 138, 140,  
 170

MACAULAY, Lord, 25

Macdonald, Greville, 8, 17, 21, 41, 44,  
 49, 141, 142

Mackenzie, Rev. Bernard, 25

Mackenzie, Mr. Compton, 25

Mackenzie, Harry (H. H. Morell), 18,  
 161, 177

Mackenzie, Rev. John, 25

Mackenzie, John Nolan, 44, 46

Mackenzie, Lady, 37, 41, 161, 162

Mackenzie, Miss. (*See* McKenna, Mrs.  
 T.)

Mackenzie, Dr. Stephen, senr., 25, 26

Mackenzie, Sir Stephen, 161, 162

Mackenzie, Sir Morell. Ancestry, 25;  
 birthplace, 23, 26; father, 25; mother,  
 26, 42; school, 26; clerk in Union  
 Assurance Co., 26; medical student  
 at London Hospital, 28; M.R.C.S.,  
 L.S.A., 28; post-graduate education,  
 29, 30; encounters laryngoscope, 30;

Mackenzie, Sir Morell—*continued*.  
 M.B., M.D., 34; private practice, 34, 47–54; founded Throat Dispensary, 35; marriage, 37; M.R.C.P., 39, 40; Throat Hospital, Golden Square, 40; appointed to London Hospital, 40; leased 19 Harley Street, 40; visited America, 43; his various assistants, 44; published *Diseases of the Throat and Nose*, 44; president, Section of Laryngology, International Congress of Medicine, 46; recreations, 51–54; summoned to Crown Prince, 69–71, 72–76; arrival in Berlin, 76; case of the Crown Prince, 77–84; Crown Prince treated in London and Scotland, 87–89; knighted by Queen Victoria, 89; Crown Prince treated at San Remo, 91–110; diagnosis of cancer, 91–98; tracheotomy performed, 104; leaves San Remo with Emperor for Berlin, 110; Emperor treated at Charlottenburg, 112–129; Emperor treated at Potsdam, 130–132; report on death of Emperor, 133; *post-mortem* examination, 134, 135; Bismarck attacks Mackenzie, 138–141; return from Berlin to London, 141; Bergmann and other German doctors attack Mackenzie, 142–145; Mackenzie replies, in *Frederick the Noble*, 146–152; reception of *Frederick the Noble*, 18, 153–156; resigns from Royal College of Physicians, 155; minute of Royal College of Surgeons, 155, 156; resolution by British Medical Association, 156; founds British Rhinolaryngological Association, 157; lectures at Edinburgh, 157–159; libel action, 159–161; illness and death, 161–163; criticism of conduct of case, 164–173, 176–177; estimate of character, 177–181

Mackenzie relics, 2, 3

Mackenzies of Scatwell, 25

Malet, Sir Edward, 16, 75, 102, 112

Masson, Prof. D., 158

Mayer, Mr. Ernest, 3

McKenna, Mrs. Theodore, 4, 5, 18, 106, 178

Meister, Joseph, 47

Metropolitan Ear, Nose and Throat Hospital, 35

Metropolitan Throat Hospital, New York, 43

Meyer, Wilhelm, 46

Moltke, Marshal von, 55, 59

Monypenny, W. F., 180

Moore, Dr. Irwin, 2, 3, 4, 12

Moorfields, Royal Ophthalmic Hospital, 36

Morier, Sir Robert, 58, 59

Morrison, Mr. Stanley, 20

Moure, of Bordeaux, 45, 46, 68

Moynihan, Lord, 5

NAINBY, R., 50

Napoleon III, Emperor, 59

Nasal sinuses, 11

Natzmer, Major von, 135

Navratil, Prof., 92

Nélaton, 29

New Palace, Potsdam (Schloss Friedrichskron), 57, 129, 130, 133, 135, 136

Nineteenth Century, 176, 177

Nowak, K. F., 72

OERTEL, Prof., 90

Oppolzer, Prof., 30

Oscar, King, of Sweden, 132

PACHYDERMIA laryngis, 81, 164

Paget, Sir James, 37, 39, 155

Paris, 29, 30, 32; siege of, 60

Parkinson, F. C., 126, 127

Parnell, C. S., 21, 54

Pasteur, Louis, 28, 46, 47

Philadelphia Academy of Natural Sciences, 47

Philosophical Institution, Edinburgh, 157

Physicians, Royal College of, 29, 38, 40, 154, 155

Pisick, P.S., 10

Pierce, Dr. R. K., 166

Pitt, William, 24

Ponsonby, Sir Frederick, 19, 22

Ponsonby, Sir Henry, 55, 125, 178

Ponsonby, Lady, 19, 55, 125

Poschinger, Margaretha von, 22

*Post-mortem* examination of Emperor, 134, 135, 165

Power, Sir D'Arcy, 5

Prince Consort, 56–58

Prince of Wales. *See* Edward VII, King

Puttkamer, 131

QUEEN VICTORIA. *See* Victoria, Queen

Queen's Westminster Volunteers, 4, 53

RADOLINSKY, Count, 97, 107

Radziwill, Princess, 22

Reid, Sir James, 71, 72, 73, 74, 79, 98, 108, 178

Robertson, Grant, 23, 137

Rodd, Sir Rennell (Lord Rennell of Rodd), 16, 21, 75, 115, 135, 138, 146, 147

Rokitansky, 30  
 Royal College of Physicians, 29, 38, 40, 154, 155  
 Royal College of Surgeons, 28, 38, 154-156  
 Royal Medical and Chirurgical Society, 33, 37  
 Royal Society, 31, 33  
 Royal Society of Medicine, 3, 157, 172  
 Russell, Sir Charles, 160

SALISBURY, Marquess of, 22, 73  
 San Remo, 90-110, 165, 166  
 Sargent, J. S., 33  
 Savoy dinner-party, 18  
 Scafati, 8  
 Schleich, C. L., 170, 171  
 Schmidt, Moritz, 94, 95, 97, 98, 145, 152  
 Schnitzler, Prof., 46, 93  
 Schrader, Dr., 95, 97, 100, 104, 109, 149  
 Schröter, Prof. von, 68, 92, 93, 94, 95, 96, 97, 145, 152  
*Scotsman, The*, 120, 158  
 Seckendorff, Count, 107, 125  
 Sedan, 59, 60  
 Semon, Sir Felix, 2, 7, 10, 38, 42, 44, 46, 50, 69, 73, 74, 76, 87, 106, 137, 138, 145, 172, 180  
 Semon, Dr. Henry C., 74  
 Senator, Prof., 126, 127, 131  
 Senn, 31  
 Sigmund, Prof., 30  
 Simpson, Sir J. Y., 28  
 Skoda, 30  
 Soerensen, Prof. J., 168  
 Spaemann, publisher, 152  
*Spectator, The*, 12, 25  
 State Insurance, 63  
 State Medicine, 54, 101  
 Steinkopff, 159-161  
*St. James's Gazette*, 120, 159  
 Störk, Prof., 92, 93  
 Strachey, St. Loë, 25  
*Student, The*, 158  
 Students' Representative Council, Edinburgh, 157-159  
 Surgeons, Royal College of, 28, 38, 154-156  
 Symonds, John Addington, 25  
 Syphilis, 38, 45-46, 94, 164-167

TAYLOR, Charles Louis, 44, 50, 156  
 Terry, Ellen, 41, 86  
 Thomson, Sir St Clair, 2, 4, 5, 165, 173  
 Throat Hospital, 2, 6, 8, 22, 35, 38, 40, 41, 42  
 Thyrotomy. *See* Laryngo-fissure  
*Times, The*, 19, 20, 21, 24, 92, 93, 100, 105, 106, 119, 120, 147, 153, 177

Toblach, 89, 90  
 Tobold, Prof., 68, 77-79, 92, 97, 142  
 Tonsillotomy, 43  
 Tonsils, mere size unimportant, 50  
 Tracheotomy, 104, 105, 165  
 Tracheotomy tube, incident of, 116-123  
 Tree, Sir Herbert, 18  
 Rousseau, 29  
 Tuberculosis of larynx, 7, 38, 164, 171, 172  
 Tucker, Dr. Gabriel, 168  
 Türck, Prof. Ludwig, 31, 33

UNION Assurance Company, 26  
 University College Hospital, 10

*Vanity Fair*, 6, 178  
 Vansittart, Lord, 58  
 Vautrain, 29  
 Venice, 90, 141  
 Versailles, 60-62  
 Victoria, Queen, 1, 55, 57, 60, 72, 73, 75, 76, 84-87, 89, 98, 108, 110, 112, 124, 125, 136, 146, 176  
 Vienna, 29, 30, 32, 42, 92, 93  
 Virchow, Prof. R., 57, 69, 79-83, 88, 92, 99, 103, 108, 127, 130, 133, 134, 141, 164, 167, 168, 175  
 Voice production, 9, 44

WAGNER, Dr. Clinton, 43, 157  
 Wainwright, Dr. Lennox, 17  
 Waldeyer, Prof., 108, 109, 133, 134, 164  
 Wallace, Prof. R., 158  
 Walthamstow, 26  
 Wargrave, 2, 3, 5, 24, 52, 53, 162, 163  
 Wassermann test, 38, 165  
 Watson, Sir P. H., 39  
 Wegner, Dr., 65-68, 72, 73, 76-84, 97, 127, 131, 134  
 Wellcome Historical Medical Museum, 3  
 Whistler, James McNeill, 8, 41, 157  
 Whistler, Dr. W. McNeill, 8  
 Whitman, Sidney, 22  
 William I, Emperor, 55, 57, 59, 61, 62, 101, 109  
 William II, Emperor (Ex-Kaiser), 1, 12, 13, 19, 22, 72, 94, 95, 101, 106, 114, 127, 129, 131, 132, 133, 136, 139  
 William, Prince. *See* above  
 Windlers, instrument-makers, 116, 121  
 Winnipeg, 4  
 Wolfenden, Dr. Norris, 21, 44, 84, 180  
 Wolseley, Lord, 85  
 Wood, Sir Henry, 9  
 Wright, Dr. Jonathan, 96

X-RAYS, 11, 38, 165

YEARSLEY, Dr. James, 35, 38

ZIRIO, Villa, 91, 94, 102, 106, 109



NAWA  
LAW  
NO. 100002



